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NEWS SUMMARY

GENERAL

Sports leaders firm on Games

World sports leaders have pledged their support for the Moscow Olympics, but have called for a reduction in nationalist flag-waving and ceremony at the Games.

The heads of 26 federations, at a meeting with the International Olympic Committee in Lausanne, Switzerland, said the games must go on no matter how many countries boycotted *them as a result of the Soviet* invasion of Afghanistan. They would not grant permission for any alternative games.

The federations called on all national Olympic committees to combat political pressure and ensure that all qualified *athletes could attend the games.* But they urged the IOC to review the ceremonies in Moscow.

Tolbert's men shot

Thirteen ministers and officials of the ousted Liberian government led by President Tolbert were executed by firing squad in Monrovia, for high treason and corruption.

Cubans rescued

A fleet of Florida fishing boats returned to Miami after picking up 300 Cubans seeking to escape from President Castro's regime.

Honduras poll

Honduras has elected its Centrist Liberal Party to lead the country's *first civilian government* after eight years of military rule. With most of the votes counted the party is expected to have a 52 per cent majority. Page 4

Cape Town protest

Police in Cape Town fired tear gas to disperse a march by 8,000 coloured (mixed race) children protesting against racial separation in South African schools. About 100,000 students boycotted classes on Monday.

Housebuilding fall

The number of houses built in Britain this year could be the lowest for over 50 years, builders fear. Some believe that fewer than 100,000 private homes will be started, compared with 140,000 last year. Page 8

Fire kills 21

Twenty-one people died and 25 were injured in a fire at an old people's home in Dijon, France. Police said the blaze *had been started deliberately.*

Guernica to return

Pablo Picasso's masterpiece, Guernica, will be handed over to Spain in the autumn by the New York Museum of Modern Art. Four Spanish cities are contesting the right to exhibit the painting.

Footnote

China has exported over 40,000 pairs of herb-scented shoes claimed to prevent sweaty feet and help cure beriberi, the Canton Daily reported.

Briefly . . .

Doctors said the condition of Yugoslavia's President Tito had improved slightly but was still exceptionally grave.

Forty-nine people who died from gunshot woulds have been taken to the Kampala, Uganda, mortuary in the past fortnight.

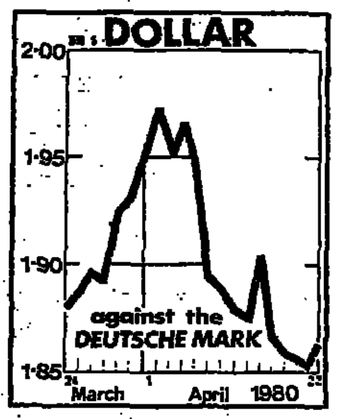
PUBLISHER'S NOTICE

The Financial Times apologises for errors contained in this issue which are due to difficulties in the reading department. We also apologise to readers in the London area who did not receive their copies of the newspaper yesterday. This was due to unofficial action by members of SOGAT employed in the warehouse.

BUSINESS

Dollar and Sterling firm

● DOLLAR AND STERLING were firm in spite of the EEC sanctions on Iran. Dollar rose



DM1.8610 (DM1.8510) and its trade-weighted index was 88.9 (88.7). Sterling closed 45 points higfiher at $2.2375, and its index was 73.5 (73.2). Page 30

● GOLD closed $8 up in London at $505.5. Page 30

● GILTS: Lull in investment demand led to profit-taking, and the Government Securities index fell 0.37 to 66.63. Page 40

● EQUITIES followed Gilts and the FT 30-share index closed 6.8 off at 434.3. The Gold Mines index dropped 14.0 to 287.2. Page 40

● *WALL STREET was 21.50* up at 780.63 before the close. Page 38

● FIAT *of Italy is reconsidering* whether to subscribe to its share of Pta 2.8bn in the Pta 6bn (£38m) capital increase *of Seat, the Spanish car group,* which is scheduled for next month. Back Page

● BL CARS' production at Longbridge, Birmingham, was halted after nearly 550 workers walked out in protest at the company's attempt to enforce new pay package conditions. Back Page; Annual report, Page 8 and Lex, Back Page

● BANQUE Bruxelles Lambert indicated that it is "suspending" its court action in New York against Chrysler for the recovery of its overdue $10m (£4.47m) loan. Page 4

● ROLLS-ROYCE lost its position as sole engine supplier for the Boeing 757 after Aloha Airlines of Hawaii said it would buy three of the aircraft with U.S. General Electric jets. Page 6.

● CHINA'S Foreign Investment *Commission approved the* country's first joint ventures with foreign partners. Page 6

● ISLE OF GRAIN power station project in Kent will be halted in June with the loss of 2,000 jobs, the CEGB announced. Back Page

● NATIONAL WESTMINSTER Bank staff association recommended rejection of the 18-21 per cent pay offer to clerical staff in the five leading English clearing banks. Page 9

COMPANIES

● AKZO, the Dutch chemicals and fibres group, plans to spend £30m to £40m on restructuring its UK subsidiary, British Enkalon. Back Page; Results, Page 29

● FAIRBAIRN LAWSON, the engineering group, requested its bankers to appoint a receiver Page 24

● S. PEARSON AND SON pre-tax profits in 1979 rose from £51.4m to £53.7m. The contribution from Pearson Longman was slightly higher at £25.7m. Page 24

● TOZER KEMSLEY and Millbourn, the international finance and forest products group, raised pre-tax profits for 1979 from £7.63m to a record £16.01m. Page 24

CHIEF PRICE CHANGES YESTERDAY

(Prices in pence unless otherwise indicated)

RISES:		
Fodens	34	+ 3
Furness Withy	395	+ 14
Pearson (S.)	202	+ 8
Pearson Longman	192	+ 7
Tozer Kemsley	79	+ 4
Travis and Arnold	272	+ 22
United Carriers	136	+ 6

FALLS:		
Treasury 10¼pc 1999	£76½	— ⅞
Treasury 13¾pc 2004 2008 (£20 paid)	£20⅛	— 1⅛
Allied Breweries	73½	— 2½
Boots	186	— 7
General Accident	238	— 6
Glaxo	204	— 6
Grattan Warehouses	70	— 14
GKN	268	— 4
Hambro Life	183	— 4
Hill (C.) of Bristol	50	— 8
ICI	362	— 8
Mallinson-Denny	72	— 3
Marks and Spencer	87	— 4
Meyer (M. L.)	103	— 4
Oxley Printing	35	— 6
Racal Elec.	243	— 5
Stylo	150	— 15
Tootal	23½	— 2
Trusthouses Forte	172	— 8
Anglo Am. Corp.	525	— 25
Anglo Utd. Dev.	87	— 6
Doornfontein	514	— 46
General Mining	660	— 40
Harmony	726	— 59
Impala Plat.	250	— 20
Libanon	804	— 70
Minorco	268	— 12
North Kalgurli	62	— 6
Otter Exploration	58	— 6
Poseidon	106	— 6
Randfontein	£27½	— 2
Samantha	62	— 8
Wit. Nigel	107	— 14

Oil sharing talks in Paris today

International Energy Agency called a meeting for today of its governing board in Paris to discuss possible emergency oil-sharing measures.

In East Berlin an Iranian delegation began trade talks after Tehran's disclosure that it would look t oEastern Europe to sell its oil following the rejection by Japan and other western countries of its latest oil price rise.

In Dubai the United Arab Emirates oil minister said his country may be willing to help West Germany and Japan make good the expected loss in oil supplies from Iran provided this compiled with OPEC regulations.

On European foreign exchange markets the dollar and sterling were generally firmer helped by speculation that the U.S. and Britain would be less severely hit than other countries by a cut in Iran's oil

In Tehran, Britain recalled its ambassador and began to reduce its embassy staff. About 300 UK businessmen and their wives and some diplomatic staff were expected to arrive in London today.

The Iran crises, Page 2

Nine set May 17 deadline for freeing Iran hostages

BY JOHN WYLES IN LUXEMBOURG

THE NINE members of the European Comunity rallied yesterday to the support of the U.S. with an agreement to implement full trade sanctions against Iran unless the American hostages are released by May 17.

Agreement on one of the most far-reaching foreign policy decisions in the history of the Community took far longer than EEC foreign Ministers had expected. But at the ende of the day the Community's demonstration of solidarity for the U.S. was largely based on the two-stage approached table last week and outlined again yesterday by Lord Carrington, the Foreign Secretary.

Limited *diplomatic and economic* measures will be taken against Iran between now and the middle of May. By then, *those countries that neew to* principally the UK, Denmark and Ireland, will have passed national enabling legislation to implement trade sanctions expected to be imposed by a meeting of Community Foreign Ministers in Naples on May 17.

By then the Nine are expected to:

● Reduce their diplomatic representations in Tehran, including possible withdrawal of Ambassadors.

● Insist on reduction ofIrainan Embassy staff in EEC capitals.

● Place an immediate ban on all arms sales and shipments to Iran.

● Ban all new economic and trade agreements with Iran.

● Introduce visa controls on Iranian nationals.

The most significant item missing from the final communique by the Foreign Ministers was the question of Iranian oil exports. Originally the UK suggested banning all *purchases of Iranian oil as part* of eht first stage of the package, but fears among some Governments that this might provoke a response *sympathetic* to Iran from other OPEC countries has led to deletion of the proposal.

Ministers believe that Iran is bound to react to the package with a ban on oil shipments to EEC countries. This would leave the EEC theoretically as an injured party and possibly less vulnerable to OPEC actian.

There is no great optimism among EEC Governments that this initial phase of measures will induce the Iranians to release the hostages.

It is widely expected that the EEC will proceed to full sanc*tions at the Naples meeting.*

The only reason for postponing a decision then would be transfer of the custody of the *hostages from the Iranian* students to the Government of President Abol Hassan Bani Sadr.

The justification for waiting more than three weeks for introducing sanctions already being applied by the U.S. is both tactical and legal.

A graduated response of the kind adopted may strengthen the Iranian moderates, believed to be led by Mr. Bani Sadr.

It is said that he has warned the militant Islamic students that not releasing the hostages would bring retribution, as indeed it will under the EEC plan.

But he has until May 17 to argue that Iran could face much more severe repercussions unless moves as made toward freeing the hostages.

An additional advantage of delay is said to be that it enables the Iarnians to call the new Parliament due to be elected on May 9 into emergency session to consider the hostages' future.

The legal requirement for a delay on sanctions, explored at great length yesterday, hinges on the problems created by commercial and service contracts being rendered void, it

Continued on Back Page

Liggett agrees to sell subsidiary to Pernod

BY JOHN MACKINION AND IAN ROGERS

LIGGETT, THE U.S. tobacco and drinks company which is fighting a $415m takeover bid by Grand Metropolitan, has agreed to sell one of its two wine nad spirit subsidiaries to the French drinks group, Pernod Ricard.

Pernod is offering $97.5m in cash to buy Austin Nichols and Co., which makes Wild Turkey, a leading brand of bourbon, and *distributes* Pernod, Campari and other wines and spirits, including some of Grand Met's brands.

Austin Nichols profits last year were $2.3m after a $2.1m charge due to a change in stock valuation method and its sales were $66.9m.

The deal is subject to the usual 30-day delay while U.S. authorities decide whether anti-trust laws may be violated. One reason Pernod advances for making the offer is that it has almost no U.S. presence and seeks to use its large cash resources to expand abroad.

Cash flow last year was *FFr 236m.*

Asked if the deal might also be subject to approval by French monetary authorities, because of the purchase of a U.S. company with eurodollars, a Pernod spokesman said, "that is one of the possibilities."

Concerned about U.S. money supply growth, the Federal Reserve Board has asked central banks of Group of Ten countries to restrain the raising of dollars by their nationals for buying U.S. companies.

Liggett said late last month after Grand Met had acquired 9.5 per cent of its shares that it was seeking other potential buyers for any or all of its businesses. It also resorted to various state courts for injunctions to prevent Grand Met from acquiring more shares.

On April 14, Grand Met announced it would bid for all the shares of Liggett and, while fending off legal actions, actually launched the bid last Friday night.

Grand Met produces J&B Scotch *whisky, which is the* largest selling U.S. brand and is distributed by Liggett's other drinks subsidiary, Paddington Corporation.

Grand Met finance director, Mr. Clifford Smith, refused to comment on the Pernod bid for *Austin Nichols last night,* saying the company had not had time to discuss it.

Last August Grand Met offered to buy Austin Nichols, believing it would be the best vehicle for acquiring a direct U.S. marketing presense, but Liggett said it was not for sale.

Asked why Pernod Ricard had not bid sooner for Austin Nichols, the Pernod spokesman said: "It was not for sale."

Pernod had sales of FFr 4.5bn last year and operating profit of FFr 338m. Almost half its sales come from Pernod itself, the rest from other spirits and wines, some of which it buys from others. Almost 75 per cent of 1978 sales were in France.

Lex, Back page

U.S. rates drop again

By Stewart Fleming and
Ian Hargreaves in New York

A FURTHER fall in U.S. short-term interest rates yesterday prompted speculatio that a further cut in the prime rate may not be far away.

Prime rates are presently spread between 19½ and 19¾ per cent. The fall in interest rates in the credit markets followed a sharp drop in Treasury bill rates on Monday.

Yesterday morning three-month Treasury Bill rates were trading at around 12.60

U.S. consumer price rise per cent.

U.S. consumer prices, Back Page

Postmen expected to accept 15%

BY CHRISTIAN TYLER, LABOUR EDITOR

LEADERS OF the union of Post Office Workers expect to announce that a 15 per cent pay offer tied to productivity concessions has been accepted by a large majority in a ballot.

Estimates of the majority range as high as five to one. The package includes conditions which were almost entrely rejected by a recent union delegate conference in spite of the leadership's efforts to get it through.

After t hat rebuff, the Post Office persuaded the UPW National Executive to resurrect the productivity element — desinged to speed the flow of mail—as part of the annual wage negotiations. The proposals were put to a ballot about two weeks ago.

In return for a 15 per cent pay increase, postmen would agree to allow the transfer of work between sorting offices in order to spread the load, and to waive some qualifications now needed for promotion.

A large ballot majority for the pay and productivity deal will come as a great relief to the Post Office, whose outgoing chairman, Sir William Barlow, has had a particularly rough ride with the unions.

It will also be a relief to the UPW leadership, which has suffered some serious defeats at conferences in the last couple of years.

The Post Office has reserved the right to go ahead unilaterally with plans for taking on casual staff to prevent a repeat of last summer's big postal backlog. This was included in the list of proposals for the last conference, but did not feature in the past negotiations.

The pay proposals would raise the postman's basic rate from £67.09 a week ot £77.15. Average earnings would increase from £104 to £120 a week, and in inner London from £121 to £137.

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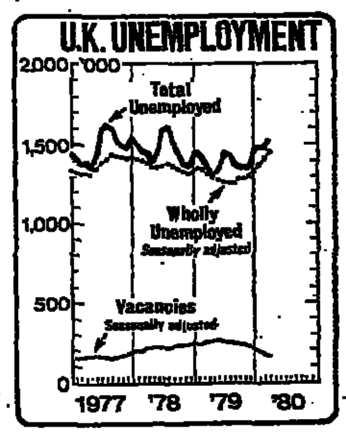
For latest Share Index 'phone 01-246 8026

Adult jobless total highest since the war

BY PETER RIDDELL, ECONOMICS CORRESPONDENT

ADULT UNEMPLOYMENT is now at its highest level since the second world war. This *follows an increase of 194,000,* or nearly 15½ per cent, since the total began to rise last September.

At the same time, notified vacancies have continued to fall sharply and redundancies are rising rapidly. This suggests *that industry is cutting back on* its labour needs much earlier than previous recessions, in response to the current financial squeeze.



Department of Employment figures published yesterday show that the total number of adults out of work in the UK rose by 44,600 in the month to mid-April to 1.46m, seasonally adjusted. This is equivalent to 6 per cent of the workforce and exceeds the previous post-war peak of 1.42m in November 1977.

The unadjusted total of all unemployed—1.52m in mid-April—is still, however, well below the post-war peak of 1.64m of August, 1977. This is because the main batch of this year's school leavers have yet to come onto the labour market, though they are likely to swell the mid-summer unemployment total.

The announcement of the further large rise in unemployment led to a series of attacks on the Government by Labour MPs and trade union leaders. Mr. Len Murray, the TUC general secretary, said the figures were "the price for the Government's disastrous attachment to monetarism."

The sharp rise in unemployment over the last month occurred in spite of the end of the steel strike. This might have been expected to have some favourable effect on the total.

The very strong upward trend in unemployment—an average monthly rise of nearly 40,000 so far this year—has come slightly earlier than some economists were expecting. The underlying level of output has been flat until recently and has not turned down.

A likely explanation is that companies have been taking anticipatory action in view of all the talk about recession and given the intense profits squeeze of the last year.

This point applies particularly *to manufacturing* where total employment droped by 135,000, seasonally adjusted, in the six months to January.

The resulting shake-out is reflected both in the regional distribution of unemployment—notably big increases in the Midlands and Yorkshire—and in theb ig jump in redundancies.

Redundancies in March are expected to reach 32,000, double the figure of a year ago, while the likely total for the first three months of this year is 85,000. *This compares* with 36,000 in the same period last year and exceeds even the figure of 72,000 in the first quarter of 1975.

A large proportion of the redundancies are in the iron and steel, construction, distribution, motor vehicle and clothing sectors.

The other major sign of industry's caution is the further fall in notified vacancies, the tenth successive monthly decline. In the month to mid-April the seasonally adjusted figure dropped by 168,500. This is 35½ per centb elow last June's peak and is the lowest figure since November 1977.

The unemployment total would have been even higher but for the Government's various job supportm easures which are now keeping 192,000 people off the unemployment register.

The scale of the current increase could mean that some ecent forecasts about the level of unemployment are too optimistic. The Treasury has always refused to publish its internal forecast but the working assumption in the recent public spending White Paper was that the avearge figure in Great Britain would be 1.65m during the current 1980-81 financial year, rising to 1.8m in 1981-82.

The unadjusted total rose by nearly 45,000 last month to 1.52m, the highest April figure since the war.

Map, Page 8;
Editorial Comment, Page 22

£ in New York

—	Apr. 21	previous
spot	$2.2415-2430	$2.2160-2180
1 month	0.24-0.29prem	0.10-0.20prem
3 months	0.10-0.05 dis	0.22-0.27prem
12 months	1.05-0.95 dis	0.70-0.55 dis

Financial Times reporters analyse the effects and the problems of the sanctions adopted by the EEC against Iran

A country sinks into internal disarray

By Simon Henderson in Tehran

"WE ARE seeing the start of a civil war," a senior diplomat said in Tehran on Monday as rival groups battled each other on the Tehran University campus. Yesterday the Left, having declared its resistance to an Islamic cultural revolution, finally moved off campus, but it is hard to imagine that the two sides will not come to blows again another day.

As has now become almost customary with such fitful incidents in Iran's turbulent revolution, Tehran itself returned to comparative normality after the student clashes had left at least three dead and hundreds injured. Shoppers crowded the pavements and the streets bustled with traffic, neither disturbed any longer by the scream of ambulances and the distant crack of rifle fire.

Even so, the rent-a-mob of Islamic fundamentalists responsible for most of the stone-throwing and knife attacks at the university quickly moved down the road for a demonstration outside the U.S. Embassy, where the 50 diplomats have now been held for a little less than six months.

Outside Tehran the reverberations of revolution remain all too apparent. Heavy fighting continued in Kurdistan, with Kurdish guerrillas besieging Irnaian army units in the city of Sanandaj.

Tension persists with neighbouring Iraq, even though the recent border skirmishes have not revived. And there are worries about the likely role of the Soviet Union, with its troops and armour in Afghanistan and over Iran's northern border. on the one hand. and its potential Western sanctions-breaking capability on the other.

Remarkable as it may seem in the West, the events in Tehran and around the country have almost completely overshadowed the crisis in Iran's relations with the U.S. and the fevered bout diplomacy now going on in Western capitals.

As a result most Iranians are broadly unaware of the horrifying arithmetic they now confront in the economic sphere. They face the prospect of trying to sell 40 per cent of their oil supplies to new csutomers at a time when the world market is far from tight and most purchasers want a more dependable supplier than Iran.

Since the failure of his strategy to extricate the American hostages from the grip of the militants students at the U.S. Embassy, the position of the moderate President Abol Hassan Bani-Sadr has come to look almost impossible. In a speech at Tehran University yesterday at the end of the student troubles, he praised the Islamic cultural revolution and condemned the left, suggesting that he has virtually given in to the hardline clerics on the Revolutionary Council

With this aparent victory by the Islamic Republican Party, the President seems little more than a titular authority now. By the time a second round of parliamentary elections are over—they are due on May 9—the Islamic Republican party will probably have consolidated its position The left will regard such developments with trepidation, and the risk of civil war will seem all the more real.

The virtual abandonment by the West of President Bani-Sadr and of the most outspoken advocate of freeing the hostages, Mr. Sadeq Qotbzadeh, the Foreign Minister, together with the present dominance of the Islamic Revolutionary Party are the twin key considerations why sanctions are now being promoted with renewed vigour — and why they are unlikely to succeed in the near future.

Led by the hardline IRP, Iranian public opinion is likely to be mobilised during the next few weeks away from its present relatively relaxed acceptance of the status quo. In the coming elections, Iran's response to the U.S.-led pressures will undoubtedly be a strong rallying call for all Iranians.

Solidarity wil lbe the watchword, in a battle which for many Iranians has long gone beyond securing the return of the exiled monarch or his wealth. The aim is to inflict a humiliating public reverse on the U.S.

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Embargo hits export recovery

BY DAVID TONGE

THE WEST can well weather the economic costs of a trade embargo on Iran, but it may find it far harder to live with the problems of enforcing that embargo.

The first trade measure to come into effect will be the halting of arms shipments. But most countries had already found that Iran was no longer the seller's market which it had been in the days of the Shah's grandiose dreams of expanding his country's hegemony.

The new regime concelled contracts such as those for modified British Chieftain tanks. The last gunboats supplied by the French were delivered at the end of 1978. Britain has not sold any arms or military equipment since the hostages were seized in November. It had already decided to delay issuing an export licence for a 20,000 ton fleet supply ship built by Swan Hunter.

The proposed trade embargo comes just as Western European businessmen were welcoming a slow but continuing recovery in the Iranian export market. In 1978, exports by members of the Organisation for Economic Co-operation and Development had been running at a monthly average of $1.3bn. In the first three mnoths of 1979 they fell to one-quarter of that elvel.

However, they have since picked up; by the last three months of 1979 they were averaging about $600m and this year the recovery seemed to be continuing.

But even such figures represent only about 0.6 per cent of total OECD exports. Further, a significant proportion of the exports consisted of food, and wil lthus not be affected by the measures proposed by the EEC. No less than 28 per cent of French exports to Iran last year were of foodstuffs, in particular sugar, wheat and beef. This year the proportion has been higher.

The exclusion of food is also significant for Iran, which depends on imports for one-fifth of its wheat consumption, one-third of its rice and sugar and four-fifths of its vegetable oil, according to recent estimates.

The reaction by businessmen has varied. In West Germany, Dr. Manfred Lennings, chairman of the Gutehaffnungshuette engineering group, said last week that his firm, which before the revolution had supplied $250m worth of motors, steel and engineering products, said that the sanctions would have virtually no effect on the company.

But in Italy a large number of smaller enterprises which had managed to claim a stake in the Iranian market have expressed anxiety. In Britain, the country's largest single exporter to Iran, Talbot cars, is anxious. It exports kits of the Hillman Hunter for assembly in Iran. Last year its export sales totalled about £20m, but this year sales had been forecast at over seven times this. It would have been the firm's best export year ever to Iran—and would have ensured continuing work for 1,500 people in Stoke-on-Trent.

The Talbot kits accounted for 10 per cent of British exports to Iran in 1979. In total, road vehicles were nearly one-quarter of British exports to Iran. Power generating equipment was also an important item, as were electrical and other machinery, chemicals and pharmaceuticals.

Asked if the British Government would compensate firms which were hit by trade sanctions, Mr. Douglas Hurd, Minister of State at the Foreign Office, told the BBC programme The World This Weekend: "No one is happy about sanctions. They are very difficult to enforce. Certainly they will be against Iran. And they involve sacrifices among the people who impose them."

When the question was repeated, he again indicated that businessmen would receieve little reimbursement from the Government.

This fear is only one of those held by businessmen. In 1978 exports from Comecon countries to Iran totalled less than one-thenth of those from the OECD, but last year the proportion rose to about one-fifth.

There is obviously a limit to the extent to which Iranian firms can switch firms but none the less the fear of a market being lost weighs heavily—particularly when there is some anxiety over whether other Middle Eastern countries might show solidarity with Iran by declaring a counterembargo.

Parallel with these fears are those of losing a number of major contracts. Since the revolution, numerous contracts for turn-key projects, power stations, ports and roads have been cancelled. But France was now hoping to win a $2.3bn deal to build an underground system in Tehran as well as a $150m contract for the delivery of four Airbuses in 1983.

Italy has just renegotiated a $1.5bn contract to construct a steel complex at Isfahan. And Japan has a $3bn petrochemical complex which is 85 per cent complete at Bandar Khomeini

In the circumstances the economic costs of these sanctions seem bearable to Western governments. There is also little fear of Iran moving the estimated half of its $15bn reserves which is not subject to blocking orders, or of it disposing of assets like its $500m investment in the West German firm Krupp, as this is subject to an arrest order.

However, Western officials still argue that the sanctions have to be properly prepared and applied. In the cases of West Germany and Britain, laws exist on the statute book which could easily be activated to ban trade with Iran — the 1961 law governing external economic relations and, in Britain, the Import, Export and Customs Powers (Defence) Act, 1939, which was one of the linch pins of sanctions against Rhodesia, and the Exchange Control Act, 1947.

However, British officials fear that it might be argued that Britain had fallen foul of the Treaty of Rome by acting under either of these laws. Hence Brtish readiness to bring specific legislation before Parliament.

Iran may have to rely on Eastern Bloc to beat trade sanctions

BY PATRICK COCKBURN

U.S. SANCTIONS against Iran and the threat of stronger action by the EEC countries and Japan is inevitably leading Tehran to look for alternative trading partners such as the Soviet Union, Eastern Europe, non-aligned states, and the U.S. allies whose support for President Jimmy Carter is likely to be mainly rhetorical.

The Iranian Government has to solve two problems: finding suppliers, and then getting the goods to Iran. Even without full-scale EEC sanctions or a U.S. naval blockade, the threat of the latter is sufficient to dissuade many shipowners from going to Iranian ports.

They fear that if they go to Bandar Khomeini or another Iranian port they could get cut off in the Gulf and in addition face high insurance premiums.

The threat to the Gulf ports is the most serious facing Iran. In February, 129 ships used the country's ports to unload 730,000 tonnes of imports. Half these ships docked at Bandar Khomeini.

President Carter has yet officially to cut off U.S. supplies of foodstuffs. A reduction in these imports would have the biggest direct political impact on the peopl eof Iran. There are already queues for some kinds of meat, eggs and vegetable oil.

Much of Iran's imports of mutton, lamb and wheat now come from Australia and New Zealand, which depends on Iran to take one-third of its lamb exports. It is easy for Australia to ban non-food exports to Iran. These were worth only $14.5m (£6.5m) in the seven months to January, but food exports over the same period were worth $68m. Shipowners' fears that they could be boxed into Iranian ports may sharply reduce Iran's capacity to bring in imports.

Constraints also apply to India, which has been asked to supply consumer and engineering goods on a priority basis. An official Indian delegation to Tehran recently was asked to supply cement, sugar, textiles, drugs, steel and tyres and tubes. Eggs, meat, onions and potatoes were also requested. Significantly, Iran also asked that Indian vessels carry the goods.

India is the major Third World country identified by Iran as a source of supplies, but Tehran's long-term security depends on the willingness of the Soviet Union and eastern Europe to replace western companies.

Some of these countries do not have what the Iranians want, and it will be difficult for the EEC to know if its exports to eastern Europe are going on to Iran. Given the eagerness of Eastern bloc countries to get long-term oil contracts, particularly if deals are done on a barter basis, they have every incentive to get goods to Iran.

Before the fall of the Shah some 60 per cent of the 100,000 TIR lorries traversing Turkey were bound for Iran. Crossing the border at Bazargan, these trucks were heavily used when Iranian ports were heavily congested in the boom years immediately after the 1973-74 oil price rises.

The largest company using this route is Bulgarian, and has some 2,500 trucks operating from western Europe. This company has another 5,000 trucks, and so their use could be stepped up.

Other goods can be brought in by sea to Turkey and moved by truck across the border. A recent agreement between the two countries ended transit fees, and new visa requirements by Iraq has encouraged many of the Turkish owner-drivers to use their own ten-ton trucks on the route to Oran. The advantage of the Turkish sea-land route, for countries not applying sanctions, is that it would avoid the dangers and heavy insurance in the Gulf.

If the wost comes to the worst the Iranians will also expect heavy supplies from the Soviet Union, routed through Astara and the railcrossing point at Julfa. Currently there is heavy congestion at Julfa, but this is the result of the need for full customs documentation rather than any lack of facilities, and more than the present 250 wagons a day could be handled if all the paperwork was done later in Tehran.

The real difficulty for Iran in the long term is not lack of machinery or spare parts but shortages of bulk goods such as foodstuffs normally moved by ship. If they receive full Soviet and East European support this problem can almost certainly be surmounted.

Energy agency to hold urgent talks on threatened oil supplies

BY RAY DAFTER, ENERGY EDITOR

THE INTERNATIONAL Energy Agency's governing board will meet in Paris today to hold urgent discussions about the impact of growing disruption in Iranian oil supplies.

As much as 1m barrels a day b/d of Iranian oil—almost 2 per cent of non-communist world supplies—could be lost to Japan and Western Europe as a result of various measures that have again put international oil trading patterns into confusion. The basic influences are:

● The European Community's decision to impose trade sanctions against Iran is expected to provoke retaliatory measures by the Iranian Government. Last night it seemed likely that Iran would halt exports to EEC countries. The importance of these exports varies greatly between member countries; France will be hardly affected while West Germany obtains 10 per cent of its oil from Iran.

In West Germany's case, the loss of supplies would be sufficient justification for its Government to trigger the IEA emergency oil sharing mechanism. Over the EEC as a whole, however, Iran's influence on oil supplies has been dropping appreciably in recent years; last year Iranian oil accounted for 8.2 per cent of supplies while in the first quarter of 1980 it represented 5.5 per cent.

● The initial refusal of a dozen Japanese trading companies to pay the latest $2.50 a barrel Iranian oil price rise has led to a halt in the supplies of 520,000 b/d contract crude exports to Japan.

● A similar pricing dispute between the National Iranian Oil Company and two European-based groups, British Petroleum and Royal Dutch/Shell, has led to further disruption in supplies to both the EEC and Japan. BP and Shell are no longer lifting their 270,000 b/d of contract crude oil from Iran. While most of this oil is used in Europe, some is shipped to Japan under an exchange deal involving BP and the British National Oil Corporation. As a result of contracta nd spot market deals Japan has been relying on Iran for up to 13 per cent of its oil requirements. Again, Japan may have ample justification for triggering IEA's emergency system.

● Portugal, not a member of the EEC, is also having to get by without Iranian crude, which last year accounted for onefifth of the country's total needs. Iran's ban on exports to Portugal, announced at the week-end, was in response to the Portuguese Government's announcement that it would suspend trade links with Iran until the U.S. hostages were released.

The new turmoil in the world oil supply market raises fundamental questions about future oil prices, the general level of supplies, the posture of the IEA and Iran's own future exporting policy.

On prices, there is a fear in the oil industry, voiced by Royal Dutch/Shell last week, that severe disruption in Iranian supplies will cause a "psychosis" among other hawkish oil producers that could lead to another round of big price rises.

On supplies, high stock levels, reduced oil demand generally and maintained production levels by countries like Sandi Arabia have dampened the shock wave caused by Iranian supply disruptions. There was a general feeling within oil companies yesterday that the world could lose 1m b/d for the whole of the summer period without undue problems.

Oil consumption in IEA countries in the first quarter of this year was about 8.5 per cent lower than in the corresponding period of last year. Supplies have been down correspondingly, a drop sufficient, in theory, to trigger the IEA "safety net" which can be applied when supplies fall by 7 per cent.

It is clear that on a number of counts the IEA members could be called upon to share their oil supplies with less fortunate countries. Japan has the best case; its Government may formally ask for help.

But it is thought unlikely that the agency will fully activate its emergency procedure, a big and cumbersome mechanism, kept in the background even in the first major Iranian crisis.

On Iranian exports, it is estimated that in recent months their exports on spot and contract bases have averaged between 1.3m and 1.6m b/d. Iran is now faced with finding new customers, boosting deliveries into a saturated spot market, or cutting back production.

Russians unlikely to risk running a naval blockade

BY DAVID SATTER IN MOSCOW

The Soviet Union wants to help foil U.S. economic sanctions against Iran. But its ability to do so may depend, in the final analysis, on its readiness to challenge a U.S. naval blockade.

Most Soviet exports to Iran have been shipped from Black Sea ports through the Suez Canal and into the Gulf. So even under existing conditions a U.S. blockade would seriously interfere with Soviet shipments.

The sea lanes would be all the more important if the Soviet Union was to decide to support Iran actively by importing Iranian oil with he help of its large and fast-growing tanker fleet and, for example, buying foodstuffs from Iran in third countries, drawing on hard currency payments for oil credited to an Iranian account.

The stakes for the Soviet Union are high. But it appears unlikely that the Soviets would take the risk of running an American blockade.

The Soviets may move cautiously because the prolongation of the crisis works to their advantage. While Iran is locked in confrontation with the United States, the world's attention is distracted and the Soviet Union is freer to deal with what observers in Moscow believe is a deteriorating situation in Afghanistan.

The Soviet Union has already moved to unqualified support for Iran in its confrontation with the U.S. This support has become important enough that the Soviet authorities have signalled that they would back Iran in its conflict with Iraq, a country with which the Soviet Union has for many years had a treaty of friendship and co-operation.

The Soviet Union has already offered to supply technical help in Iran's oilfields and despite food shortages, it may divert meat and grain supplies to Iran if there is a big enough political request.

One important indication of the direction in which Iran's attitude to the Soviet Blos is moving would be the beginning of work on an Iranian oil pipeline to the Soviet Union. Soviet pipeline building capacity is believed to be fully taken up so work on an Iranian pipeline would probably involve diverting resources from the domestic pipeline construction programme. This could be done without a measure of confidance about Iran's political reliability.

The Soviet Union signalled recently that it was prepared to transit goods to Iran across its territory if there is a blockade but Soviet efforts to supply the Iranians may be hampered by the inadequacies of the overland route.

However, the Soviets have completed a big freight trans-shipment at Astara on the Iranian border and are pressing ahead in helping to electrify the Dzhulfa to Tebriz railroad on the Iranian side.

WHERE IRANIAN OIL HAS BEEN SOLD IN RECENT MONTHS

CONTRACTS	'000 barrels/day	DELIVERIES (including spot market sales)	'000 barrels/day
Japan	520	Japan	600
BP/Shell	270	Western and Eastern Europe	700
Other Western Europe	175	Asia	200
Eastern Europe	100	Rest of World	50
Third World Countries	300		
TOTAL	1,365,000		1,550,000

Source: Industry and diplomatic estimates

What Iran wants in return for releasing hostages

BY ANTHONY McDERMOTT

THE CONDITIONS the U.S. have been asked to fulfil to effect the release of the 50 hostages held in the embassy in Tehran since November have ebbed and flowed under the influence of U.S. polici estowards Iran and the uneven fluctuations of Iranian politics.

At various times and in various combinations, the militant students, Ayatollah Khomeini, and the leading clerics and politicians have demanded: the return of the Shah (now convalescing in Egypt); the unfreezing of his assets and those of his family; a damning and humiliating account of past U.S. relations with Iran, either by the U.S. itself or by an independent body, such as the UN; and the ending of all U.S. sanctions.

Lurking in the background have always been the threats that hostages might be murdered, or some tried as CIA agents. And the Ayatollah has broadly shifted with characteristic and opaque evasiveness his position, from wnating the Shah returned to accepting whatever Parliament decides.

Parliament's second round of electionsw ill probably be held two weeks after the scheduled date of May 2. Even then they may not convene at the earliest until mid-June, and the hostages may not be at the top of their agenda. They are believed to be in favour of soft demands, but would be unwilling to vote for them unless they knew first that Khomeini would agree, and that the U.S. would accept them.

The Revolutionary Council is split between soft-liners such as President Bani-Sadr and Mr. Sadeq Qotbzadeh, the Foreign Minister, and hardliners such as Ayatollah Mohammed Beheshti.

European action is major shift in policy on Mideast

BY DAVID HOUSEGO

European Governments, by joining the U.S. yesterday in taking the first step towards diplomatic and economic sanctions against Iran, have embarked on a course that runs counter to a major plank of their Middle East policy since the 1973-74 oil crisis.

This has been to exploit geographical proximity and mutual economic interest by linking Europe to the Gulf's oil-producing states (including Iran) through a bond that would survive the stormier passages in U.S.-Middle East relations—notably over the Camp David accords between Egypt and Israel.

The EEC has cast its lot in with the U.S. because of the overriding importance to Europe of the Atlantic Alliance. In doing so, it has in large measure abdicated atempt to play the part of broker between Iran and the U.S., attempts which other organisations and invividuals—from the Palestine Liberation Organisation to Dr. Kurt Waldheim, the United Nations Secretary-General — have also undertaken, also with no success.

At the root of the quarrel between President Carter and Ayatollah Kohemeini's régime over the fate of the hostages has been the clash of two cultures unable to finda common language.

The U.S. has seethed with indigation that any government —even one as disorderly and divided as the Ayatollah's—could give its backing to the illegal detnention of 50 hostages by militant students intent on blackmailing a superpower in pursuit of a vendetta against the former Shah.

It has spent more than five humiliating and exhausting months in attempting to find people in Iran with whom it could negotiate and who cold deliver what they had promised.

To Khomeini's supporters, such an understanding is irrelevant, precisely because the humiliation of U.S. power is one of the focal points of the revolution enabling it to establish its stature in the Moslem world and among the non-aligned.

In the black-and-white morality of Khomeini, the U.S. represents a satanic evil which, working through the Shah, corrupted Moslem values and fettered the country's independence.

Negotiations over the hostages have been subsumed to this uncompromising view of the U.S., enabling the Iranians to shift the basis of their demands from calling for the deportation of the Shah to stand trial, to a public apology for America's "wrongdoing" in Iran—without ever giving the convincing sense that any one gesture could satisfy the appetite of the revolution.

In this sad history of misunderstanding, the main milestones are easily chronicled: there was the admission of the Shah to the U.S. on October 22 for medical treatment, which was taken in Iran as a slap in the face for the Revolution; the takeover of the U.S. embassy on November 4; the subsequent freezing by the U.S. of Iranian assets and the U.S. decision to cut oil purchases from Iran.

Then there was the Security Council resolution on trade sanctions in January to which Europe subscribed but which was vetoed by the Russians; the attempts to find a compromise in January and February through Dr. Waldheim and a five-man UN mission on the basis of a commission of inquiry into U.S. relations with Iran; and the hopes that emerged in early February following Mr. Abol Hassan Bani-Sadr's election as President and his declaration that he wanted and was able to secure the release of the hostages once "certain" conditions had been fulfilled.

Finally there was Khomeini's dashing of such hopes in late February when he declared the hostages' fate would be decided by the new Majlis (Parliament); the negotiations through March and April to get the hostages transferred to the control of the Revolutionary Council; President Carter's decision to sever diplomatic relations with Iran and impose trade sanctions after it emerged that the hostages would not be transferred; and subsequent U.S. pressure on the EEC to follow suit.

The Europeans are going at least part of the way with President Carter in the hope of forestalling the military action against Iran which he has threatened more forcefully

In helping to tighten the squeeze on Iran, European governments hope they will be able to bring home to those Iranians outside the Ayatollah's circle who are weary of Islamic rhetoric and economic disorder that a change of policy or of government is needed.

Gulf obliged to oppose EEC move

By Richard Johns

THE European Economic Community's decision is likely to be deplored and condemned, vicifferously or quietly, and for different reasons, by every Muslim and Arab country from the Karakoran Mountains to the Bosphoros

Islamic solidarity should not be underestimated. None of Iran's neighbours love Khomeini's regime. The government of Saudi Arabia, like the Baathists in Iraq, has particular cause to want an end to the clerical junta. The Iranian Revolutionary Council has called upon the people of both countries to overthrow their masters.

The Islamic Conference in January condemned Soviet military intervention in Afghanistan unanimously. But the price of such a strong resolution was one expressing great concern at "the efforts of certain great powers to exert various forms of pressure on Islamim states," that is Iran.

Religious sentiment apart, it was felt that Islamic solidarity cannot be disassociated from regional solidarity. Common security, it was thought, would be best ensured by co-operation, non-alignment and keeping both super-powers out of the region.

Turkey has already said that it will have no part in sanctions. Joining forces with the EEC could seriously endanger Mr. Suleyman Demirel's Government by playing into the hands of the right-wing, pro-Iranian National Salvation Party. Pakistan is expected to condemn the EEC move explicitly and facilitate the flow of goods, including surplus rice, to what General Zia ul-Haq describes as "brotherly, neighbourly Iran."

There is justified apprehension that the frenzy likely to result in Iran from concerted sanctions will spill over and threaten neighbouring regimes. Shi'ites are probably the majority in Iraq and already boiling with disaffection.

As the riots in Qatif last November and February showed, the House of Saud faces grave problems with the Shi'ites in its eastern province. Government nerves in Bahrain, and to a lesser extent, Kuwait, are on edge for the same reason.

Above all, and almost too horrific to contemplate, would be a hardening of attitudes in Washington and Tehran that could lead to a U.S. naval blockade. The Muslim countries perceive clearly, that this could trigger an Iranian-Arab oil embargo and a super-power conflict in the region.

OVERSEAS NEWS

South Yemen President 'was forced to resign'

BY IHSAN HIJAZI IN BEIRUT

THE FORMER president of South Yemen, Abdul Fattah Ismail, was forced to resign at the weekend by other leading members of the ruling Yemeni Socialist Party, according to South Yemenis quoted in the leftist daily As-Safir, here yesterday.

The news came amid signs that other changes in the Marxist regime in Aden may be imminent.

The State-controlled Aden News Agency reported that the party's Central Committee, the highest authority in South Yemen's political system, has been meeting under its new Secretary-General, Mr. Ali Nasser Mohammed, to discuss the status of the party, economic and political matters, and ideological action.

Mr. Mohammed, who is the Prime Minister, also replaced Mr. Ismail as President from now on, Mr. Ismail will be party chairman, and will devote all of his energies to ideological matters.

The official reason given for Mr. Ismail's resignation was ill-health. The outgoing president is known to suffer from a chronic stomach ulcer, and had in the past received medical treatment in the Soviet Union.

As Safir quoted South Yemeni as saying that several members of the party's politbureau called on Mr. Ismail at *his home and asked him to* resign after he had rejected decisions taken by them in his absence.

"He wrote his resignation and turned it over to them," the Yemeni's said, according to the newspaper. They added that while Mr. Ismail was in Tripoli attending the conference of the Arab "Confrontation Front," the Politbureau met in Aden and decided to take action against former Government officials accused of irregularities while in office. The identity of the officials was not disclosed.

Mr. Ismail was reported to have warned that such action would set a precedent that would only sharpen conflicts within the Government.

After his resignation was obtained, the party's Central Committee was summoned to an emergency session to vote on it, As-Safir said. The resignation was accepted by a narrow majority.

The next move is to appoint a new Prime Minister, so that Mr. Mohammed can devote his time to his two posts as President and leader of the ruling party.

Arab diplomats said the new Head of State has more charisma than his predecessor. Mr. Mohammed, 41, is more accessible than Mr. Ismail, and is said to favour the rise of home-grown national capitalism instead of strict and total socialisation of the economy as advocated by Mr. Ismail.

Protests disrupt Assam capital

BY K. K. SHARMA IN NEW DELHI

THE ASSAM capital, Gahati, was severely disrupted yesterday when students demanding *the deportation of all* "foreigners" from the state picketed government offices, banks and other public institutions. This latest action is expected to continue for five days after which the agitation is likely to be intensified.

A curfew was ignored with impunity by thousands of Assamese who marched on oil installations to start picketing despite patrols of armed soldiers and police. All oil production in Assam, which supplies a third of India's needs, has now come to a halt.

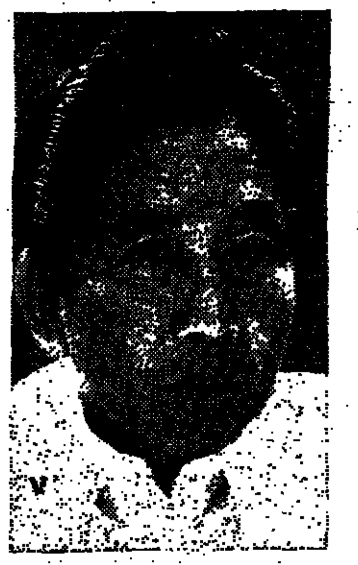
The new phase of the agitation has been launched in response to a call by the All *Assam Students Unions and* other bodies supporting the seven-month-old action against "foreigners" who are claimed to be taking jobs from native Assamese. So far, all talks have failed and earlier this week the authorities arrested hundreds of student leaders.

The protest action was helped yesterday by the Assam High Court which ordered that curfew passes should be issued to enable people to shop. This has rendered the curfew virtually useless and is expected to encourage hundreds of thousands to join the agitation which has taken on the character of a mass civil dis-*bedience movement such as has* not been seen since the Indian independence movement.

Tension is increasing every day and yesterday a number of opposition leaders demanded that Mrs. Indira Gandhi, the Prime Minister, make another attempt to negotiate with the agitators. Mrs. Gandhi met *Chief Ministers of all states in* the region yesterday to discuss ways to improve their economic conditions but this is not expected to affect the movement in Assam.

Marcos blocks new labour law

BY LEO GONZAGA IN MANILA



President Marcos: pleas by businessmen.

LEGISLATION TREATING unfair labour practices in the Philippines as criminal rather than civil offences has suddenly been frozen by President Ferdinand Marcos. He took the action at the request of the *business community just before* he left on a visit to Hawaii.

The local confederation of employers as well as the American, European and Japanese Chambers of Commerce are worried that the Bill might be used by unions to harass management. They made their feelings known when the Bill was before the National Assembly, and when it was enacted with only minor modifications.

Citing "our past experience," *the foreign businessmen* claimed that charges of unfair labour practices were filed by workers against employers on "very minor issues." They foresaw a situation where the abiilty of the executives of foreign corporations to leave the country might be restricted because of "criminal charges" pending against them alleging unfair *labour practices.*

President Marcos said he would not act on the new law until after the Government, unions and employers have held their conference on wages and other issues. This meeting is now due in mid-May.

In the meantime, Mr. Blas Ople, the Labour Miinster, has promised that the concerns of local and foreign businessmen will be taken into account in the formulation of the guidelines. The Trade Union Council of the Philippines has also promised to exercise its rights under the law "responsibly and sparingly."

EUROPEAN NEWS

Rupert Cornwell assesses the impact of today's presidential elections

The end of an era for Greece

AN ERA of unnatural simplicity in Greek politics is drawing to a close. The 300 members of the Athens Parliament today are holding the first round of voting. to choose a president. Whatever the outcome — whether Mr. Constantine Karamanlis, the Prime Minister, is elected, or whether failure in three rounds of voting to find a successor to Mr. Constantine Tsatsos leads to early general elections in June—things will be very different thereafter.

The complex process set in motion today heralds, in one *form or another*, the *beginning* of the end of Greece's "Karamanlis age." Mr. Karamanlis has been either Prime Minister of his country or brooding in lofty exile in Paris, while first other politicians, and then soldiers, shared the spoils of power. Since his triumphant return in 1974, and the restoration of democracy after seven years of military dictatorship, he has until recently ruled virtually undisputed.

Not since the days of Mr. Eleftherios. Venizelos earlier this century had any single figure been so dominant. Increasingly, however, things have been going wrong, and the delicacy of the calculations surrounding the presidential elec-*tion is proof that* the Prime Minister is no longer in absolute control of events. In fact, this election's importance is less who will occupy the potentially powerful presidency, than its influence on the timing and theme of the general elections, which must be held by November 1981, but which could take place in less than two months.

For the first time since the fall of the Colonels, the result is not a foregone conclusion. Since 1979, the economy has been under increasing strain, with inflation topping 20 per cent. Mr. Karamanlis has become steadily more hemmed in on the domestically explosive topic of Greece's possiblt return to the integrated structure of the Atlantic alliance, and of relations with Turkey, while even membership of the European Community, which arguably will be Mr. Karamanlis's most importan political legacy, seems laden with as many dangers as opportunities.

Above all, though, he has fallen victim to that sonstant of Greek politics, dissatisfaction with any ruler, however sucesful. A desire for cange is ever

Mr. Constantine Karamanlis: the dominant figure.

more apparent, a desire nurtured by the Governments problems on other fronts. That change is unlikely to come from within the ruling New Democracy party. Should the 73-year-old Mr. Karamanlis become President, his succesor as party leader *is generally* expected to be Mr. Evangelos Averoff, the Defence Minister, who is only one year younger than Mr. Karamanlis.

Opinion polls in Greece must be treated with some caution, but there is no doubt that New Democracy, which won 42 per cent of the vote in the 1977 general election (and a large parliamentary majority because of the "reinforced proportionality" electorial system) would do less well today.

Almost certainly, the Panhellenic Socialist Movement (Pasok) of Mr. Andreas Papandreou would significantly improve its 1977 showing of 25 per cent, perhaps not to the extent of overtaking New Democracy as the largest party, but possibly enough to force New Democracy to ally with small right or centre parties.

The Karamanlis and Papandreou visions of Greece's future are very different. Possibly the differences will become blurred, given the volatility of the party structure, founded on personalities rather than ideas. But, to outward appearances at least, *the divide is very steep*— between conservatism and a fairly fradical socialism.

zMr. Papandreou is on of the most speculated-upon politicians in Europe. His oratorical skills, his radical ideas, and a certain scepticism over whether he means what he says, reminds one almost irresistibly of Mr. Tony Benn in *Britain. The comparison is mis*leading, but similarities do exist.

Mr. Papandreou is also part of an emerging "south Mediterranean left,"tempted by nonalignment. It is no coincidence, for example, that he may soon visit Rome to see Sig. Enrico Berlinguer, the Italian Communist leader, and an advocate Whatever the substnce to his opponents' claims that he is basically Marxist, more to the point is Mr. Papandreou's insistence that Greece should leave the Atlantic alliance altogether.

A recent poll suggested that 58 per cent of G}reeks favoured a neutral Greece, and only 12 per cent wanted it back in the alliance's integrated military structure, from which Mr. Karamanlis withdrew after the Cyprus invasion. Yet the Prime Minister would apparently still *prefer Greece back in*, and it is easy to see how failure to break the deadlock over the alliance, and the dispute with Turkey over the Aegean, reinforces the appeal of his rivals' call for a more independent foreign policy.

Thus far Mr. Papandreou has done the easy part for any politician — focusing grievances without being too precise on what changes he would introduce. A tougher line on multinationals and the promise of greater state intevention and social welfare is tailor-made for *his natural constituency of an* increasingly urbanised working class and the young. He has wooed the important farming community, and played on the understandable apprehensions of small business over the full blast of European Community competition.

But fo rall the relevance of Mr. Papandreou's emphasis on *social change to match economic* transformation, it probably remains true in Greece, as elsewhere, that oppositions do not win elections, governments lose them. Nowhere is this more apparent than in the economy.

Growth was 6 per cent in 1978, 3.9 per cent last year, and may not top 2 per cent this. The payments deficit widened to \$2.3bn *last year.* In a year, the drachma has lost 14 per cent or more against major currencies, and inflation is around 24 per cent, fueled in part by a large total public sector deficit. In part, the deterioration cannot be blamed on the Government. Greece depends on imported oil which, in 1980, will cost an estimated \$2.5bn. *As it also has* to buy abroad many consumer and other manufactured goods, it is exceedingly vulnerable to imported inflation.

But a lack of consistency in economic policy, and the growing and inevitable paralysis of decision making in the run-up to the presidential elections (and perhaps parliamentary ones as well), has not improved matters. The outlook is not all bleak. For al lits imperfections and lack of investment, the Greek economy has shown remarkable vitality.

In this more difficult economic climate, it is not surprising that membership of the European Community, despite its likely advantages for Greek farmers and its over-riding political importance as a guarantee of democracy, is causing worry.

Theoretically, the adjustment laid down by the previous 1962 association agreement for the completion *of the removal of* tariff barriers will not be altered. But it is hard to see how membership will not see a surge in imports, while to take full advantage of new export markets, Greek companies will have to invest more and improve the quality of their goods. None the less the Government argues that the first five years of Community membership should produce a net gain from the Community budget of 500m units of account.

Perhaps more important is the hope of another, less tangible benefit—that being part of the Community and its machinery will force the creation of a bureaucracy and civil service which meets Greece's needs, something the politicians thus far have not achieved.

These, however, are small considerations in immediate political terms. More to the point is the worsening international situation which could held to turn the tide in favour of a strong and proven leader like Mr. Karamanlis. This, like the economic prospects, is a *factor in the complicated calcu*lation of whether elections now might prove better than elections in 1981. But already it seems clear that Mr. Karamanlis, an immensely proud man, will not be granted his wish that a grateful parliament and nation will accord him a triumphant first-ballot election to the presidency.

EUROPEAN NEWS

Walker opposes farm concessions

BY MARGARET VAN HATTEM IN BRUSSELS

THE BRITISH Agriculture Minister, Mr. Peter Walker, yesterday carefully dissociated himself from any agreement to cut Britain's payments to the EEC budget which would involve price risos for milk, sugar and wine. But he did not rule out the possibility of such an agreement being reached at the EEC summit in Luzembourg at the weekend, or later in the year.

This follows speculation that the British Government might be contemplating a package deal on the budget involving concessions on farm price rises.

"Our position at the moment is that we would not agree to anything that did not include a price freeze on these three products," Mr. Walker said. "It's no use putting up the cost of the Community's agricultural budget to get savings elsewhere, because these savings would be cancelled out."

However, he did not exclude a change of attitude by the UK Government. "I have not ruled out any possibilities," he said. "There might even be another Farm Minister next year."

The Agriculture Ministers will resume their talks this afternoon, when the European Commission is expected to produce a paper summarising possibilities for a consensus on farm prices to be presented to the Luxembourg summit. The French Government wants an outline agreement on farm prices as a precondition to concessions to Britain on its budgetary demands.

Chances of reaching a consensus today appear remote, however. Wide gaps have emerged on the question of dairy reforms between the five countries with large dairy farms (Italy, the Netherlands, Denmark, Ireland) and the UK which would like a uniform tax on excess production, and the remaining four countries which want their smaller farmers exempted from the proposed tax.

On the question of prices, few Ministers have stated their position in terms of figures, but most appear to want bigger rises than the average 2.4 per cent proposed by the Commission.

Kielland's loss delays northern drilling slightly

By Fay Gjester in Oslo

THE LOSS of the North Sea hotel platform Alexander Kielland is likely to delay only slightly the start of exploratory drilling in Norway's northern waters, originally due to begin on May 15.

Saga Petroleum, operator of one of the three northern blocks involved, has said it will postpone operations for about a fortnight. It has contracted Norsk Hydro and Statoil, operators of the other two blocks, about a revised start-up

The company said the extra time was needed to allow the Government "to clarify the circumstances connected with the Kielland accident."

Norks Hydro said it would delay its rig's departure until after the Government's report to Parliament about the accident.

Gromyko faces chilly Paris visit

BY ROBERT MAUTHNER IN PARIS

FRANCE is expected to reiterate its call for a withdrawal of Soviet troops from Afghanistan during a two-day official visit by Mr. Andrei Gromyko, the Soviet Foregin Minister, to Paris, starting today. It will be his first visit to a Western capital since the December invasion of Afghanistan and he will have talks with President Giscard d'Estaing and French Foreign Minister.

Though the French have strongly condemned the Soviet intervention and have recently hardened their criticisms of Moscow, they have argued all alongt hat lines of communication to the Kremlin must be kept open. Only through continued contacts can Moscow be persuaded to reverse its policy, the French Government maintains.

As the Soviet Union's closest Western partner, the French feel they have a better chance of persuading Moscow to modify its policies. But Paris clearly has become increasingly disillusioned about the prospects of a Soviet change of heart.

M. Francois-Poncet issued a particularly stiff warning to the Soviet Union in the National Assembly last week that failure to end the military intervention could destroy the whole edifice of East-West detente.

He rejected all Soviet explanations for the invasion of Afghanistan and said that France had "something to tell the Soviet Union."

The prospect of a cool reception in Paris will not deter Mr. Gromyko from trying to drive a wedge between France and its Western allies, particularly the U.S. and West Germany, which is regarded by Moscow as Washington's "Trojan horse" in Europe.

According to reports from Moscow, the Foreign Minister is expected to go out of his way to sing the praises of detente and to separate the Afghanistan issue from all the other areas in which relations between the West and the Communist countries can be improved.

Appeal for eye donors

A SERIOUS shortage of eye donors means blind people are denied the chance to see again, according to the European Society of Ophthalmology.

The sociey is appealing for more donors. It wants people to carry a card donating their organs, including eyes, to hospitals on their death.

Swedes plan big rise in investment

By William Dullforce in Stockholm

SWEDISH INDUSTRY is poised for a 20-30 per cent volume increase in capital investments this year, according to the annual survey of company intentions b ythe Federation of Industries. But a shortage of skilled labour may deter some companies from fulfilling their plans.

The suvery, covering 250 of Sweden's largest companies, points to a rise in output of about 4 per cent with demand from export markets continuing stronger than from the home market. Last year industrial production recovered sharply

Companies expect the value of their deliveries to be up 12 per cent this year, but prices will rise faster than in 1979 and volume growth will be lower. Order books on average were 20 per cent larger at the beginning of 1980 a year earlier.

Capacity utilisation was around 90 per cent last year but the expected increase in capital investment did not materialise.

A number postponed investments until this year, probably to awaait the result of March's national referendum on nuclear power which has approved the completion of 12 plants. However, executives of several companies quoted yesterday in the Stockholm technical journal, Dagens Industri, expresed concern about the labour shortage. The engineering industry needs to recruit almost 10,000 new workers, it is estimated.

AMERICAN NEWS

Belgian bank suspends $10m Chrysler suit

BY GILES MERRTIT IN BRUSSELS

BANQUE BRUXELLES Lambert is "suspending" its court action in New York against Chrysler for the recovery of its overdue $10m (£4.5m).

The Belgian bank's decision to withdraw its suit, at least for the time being, is expected to give Chrysler a much-needed breathing space in its attempt to secure fresh financial support.

The news at the end of last month that Banque Bruxelles Lambert was taking legal steps to recover its loan t oChrysler, prompted a number of other foreign banks to threaten to pull out.

Citicorp, the second biggest U.S. bank, is understood to have made it clear that it will not participate in the $2bn Chrysler rescue operation now under discussion, if existing lenders are allowed to quit.

The Belgian bank has made it clear that the temporary suspension of its suit for procedural and technical reasons, although it was being conceded in Brussels that the move would give the bank time for reflection and that possibly a new arrangement might be reached with Chrysler.

Since it became known that Banque Bruxelles Lambert, Belgium's No. 2 banking group, was suing for repayments, it is believed to have come under increasing U.S. pressure to drop its action. The bank is reported to have been warned of the risk of precipitating the collapse of Chrysler, which now has outstanding debts totalling about £4½bn.

Until now the Belgian bank has insisted that although Chrysler was still paying interest on the $10m loan, it is over a year since warning was given that the loan could not be renewed when it matured last January.

The Belgian bank is known to be concerned that in the event of Chrysler's failure, the non-U.S. lenders might fare less well in terms of recovering a proportion of their debt than the U.S. banks.

Of the 400 financial institutions involved in lending consortia for Chrysler, about 50 are foreign and their loans are believed to total $½bn. The point is also emphasised in Brussels that Banque Bruxelles Lambert was not the first bank to demand repayment by Chrysler. It followed the First Security Bank of Utah.

Whether or not Banque Bruxelles Lambert's decision to halt its court action will aid the present attempts to restructure Chrysler's debt is unclear. The U.S. Government Chrysler Loan Guarantee Board's decision on the new rescue plan, which would involve the bank's contributions of $650m in interest rates concessions on existing loans, is not expected for several days.

Meanwhile, Chrysler announced that it will run into a serious cash crisis within the next fortnight if Government aid is not forthcoming.

Dislocation in Detroit—Page 22

Jamaica 'has secured $270m'

BY HUGH O'SHAUGHNESSY, LATIN AMERICA CORRESPONDENT

JAMAICA whose government broke off negotiations with the International Monetary Fund last month over the Fund's terms for new loans, claims to have secured more than half the money needed to meet its present cash crisis.

Of the U.S.$430m needed in the short term, some U.S.$270m is already being secured, though officials admit that the balance still has to be found.

The $270m is made up of the rescheduling of $65m of outstanding debt, a facility of between $90m and $95m, in oil purchase facilities from Mexico and Venezuela, $50m from a group of donor countries, and $60m in loans from Libya and Iraq, of $50m and $10m respectively.

The Government hopes that part of the gap will be covered by increased tourist receipts and the system of imports under which goods are bought with funds held for importers outside the country.

A Jamaican team is at present in Libya finalising the much-delayed loan from Libya. Mr P. J. Patterson, Jamaica's Foreign Minister, goes to Frankfurt this week to sign the final documents for a DM20m loan from the Bonn Government.

Mr. Percival Patterson, Jamaica's Foreign Minister

The British Government has so far been sceptical about the non-IMF policies adopted by the Government of Mr Michael Manley in Jamaica. Mr Patterson saw Mr Nicholas Ridley, the Foreign and Commonwealth Office Minister with responsibility for the Caribbean, earlier this month, for a meeting in London which appears to have been somewhat frigid.

The Manley Government is hoping to get a meeting in just over a month of those countries who have contributed to the World Bank's multilateral scheme for the Caribbean.

These include Canada, the U.S., West Germany, the Netherlands and Norway. It is from these that the Jamaicans hope to raise $60m. Oil finance from Mexico and Venezuela is expected shortly, from the latter perhaps by the end of this month.

In London yesterday, Mr Tom Adam, Prime Minister of Barbados, called for a "new look" in relations between Jamaica and the Fund. While expressing reservations about the Fund's practise in imposing conditions on borrowers in the Third World, he wondered whether Jamaica had fully thought out the alternatives to the IMF.

Canada 'heads for 10% inflation'

BY OUR TORONTO CORRESPONDENT

THE CANADIAN Federal Budget is heading for a C$14.2bn (£5.4bn) deficit in the current fiscal year, Mr. Allan MacEachen, Finance Minister, said yesterday when raising taxes on tobacco, liquor, and corporate incomes.

The Minister told the House of Commons that the deficit would rise by C$2.7m compared with the 1979-70 fiscal year. He also forecast that the Canadian economy will experience real growth of only 0.5 per cent and that unemployment will increase to 8 per cent from 7.4 per cent at present.

Inflation would climb to 10 per cent from 9 per cent last year, the Minister added. The budgetary statement — Mr. MacEachen refused to call it a budget—contained many elements introduced by the defeated Progressive Conservative Government last December, but did not include a provision to allow deduction of home-owner mortgage interest against tax.

This move would only aid the "limited" number of people who actually face the loss of their homes because of high interest rates, Mr. MacEachen declared.

Canadians will now pay about 1 cent more on a 12 oz bottle of beer, about 13.5 cents on wine, and 11 cents on liquor for standard bottle quantities. The price of a packet of 20 cigarettes will rise by 2.5 cents.

A two-year 5 per cent surtax on corporate taxes first mooted by the Conservatives, will be backdated to January 1.

Mr. MacEachen said the Liberal Government would not be re-introducing the controversial 18 cents a gallon excise tax on transport fuels—one of the principal reasons for the Government. As a result it will have C$2.5bn less in revenue than projected by the Conservatives in December.

Mr. John Crosbie, the former Conservative Finance Minister, said that by re-introducing an emasculated version of his Budget, the Liberal Government had committed a "disastrous error" which would shake the confidence of the financial community and Canadians trying to come to terms with the present economic crisis.

Breach in Nicaragua Junta

By William Chislett in Mexico City

THE FIRST serious breach in the five-man Nicaragua Junta, installed after the Sandinista guerrillas overthrew President Anastasio Somoza's dictatorship last July, occurred when Sr. Alfonso Robelo, the private sector's representative, resigned.

Sr. Robelo gave no reason for his resignation, but it is known that he had been unhappy for some time about the leftward direction the country is taking.

His resignation follows that of Sra. Violeta Chamorro last weekend, apparently for health reasons.

Sr. Robelo, a wealthy manufacturer of edible-oil who headed the moderate opposition to Gen. Somoza, had clashed with the Sandinistas about the need to maintain a private sector and create a Western-style democracy.

Last month, he launched the Nicaraguan Democratic Movement which called for municipal elections next year and geenral elections in 1984. His party has been attacked on the Sandinista-controlled state radio.

Behind Sr. Robelo's resignation is a growing concern by the country's private sector that the Sandinistas, many of them Marxists, intend to consolidate their position and edge the country towards socialism.

Mexico nuclear decision likely by end of year

BY WILLIAM CHISLETT

THE MEXICAN Government is expected to decide by the end of the year on developing a nuclear industry for producing electricity.

Canada, France and Sweden are completing feasibility studies on different nuclear systems which may well be presented to President Jose Portillo when he visits those countries next month.

Canada is preparing a study on the Candu heavy water system, France and Sweden on light water systems. Mr. Staffan Burenstam, Swedish Trade Minister, told the Mexican President this week that his country's study would be ready by the time Sr. Portillo visits Stockholm.

Mexico has the world's sixth biggest proven hydrocarbon reserves, but wishes to diversify energy sources. Mexico is also rich in uranium.

Some 87.5 per cent of Mexico's primary energy requirements are supplied by oil and gas, 5.3 per cent by coal, 6.9 per cent by hydro-electricity, with 0.3 per cent coming from geothermal sources.

Mexico's first nuclear powered plant, Laguna Verde in the State of Veracruz, should be completed by 1982 when the first of two 654 MW reactors will come on stream. The second reactor is scheduled for 1983.

Mexico has proven uranium reserves of 8,828 tonnes and geologists believe that potential reserves could be as high as 225,000 tonnes.

The country's energy officials believe that one-third of Mexico's primary energy requirements could be supplied by nuclear power by the year 2000. But to achieve this, decisions must be taken soon on whether to develop a nuclear industry and which system to use. The advantage of the Candu system is that it uses raw, not enriched uranium.

Honduras chooses Liberals

TEGUCIGALPA — Honduras has elected its centrist Liberal Party to lead the country back to Parliamentary democracy after eight years of military rule.

With most of the votes in Sunday's election counted, the Liberals had an 8 per cent lead over the Right-wing National Party and were expected to hold a 52 per cent majority in the Assembly.

The 71-seat Assembly has been instructed by the ruling military junta to draw up plans for a transition to democracy and arrange Presidential elections.

None of the country's left-wing parties was allowed to contest the election. The third participating party, the centre-left Reform and Unity Party, too about 4 per cent of the vote.

Reuter

هكذا من الأصل

AT LAST, A PERFORMANCE CAR THAT'S AS SAFE AS A VOLVO.

The new Volvo 244 GLT is everything you'd expect from Volvo.

It's built around a strong steel cage with crumple zones at the front and rear.

(Capable of soaking up a 50 mph collision.)

Those familiar shock-absorbing bumpers are still very visible.

While we haven't skimped on the things you can't see, either.

The doors are still inlaid with steel bars to protect you from side swipes.

The zinc coating we use is still about 4 times thicker than that used by many other car makers. (Which means 4 times more protection from rust.)

New engine

But if some things are familiar, some are different.

The 244 GLT has a top speed of 112 mph.

It moves from 0-60 mph in just 9.5 seconds.*

(Faster than the BMW 525 or Alfa Romeo Alfetta 2000L.)

The new 2.3 engine is remarkably economical and a four-speed gearbox with overdrive makes it ideal for motorway driving.

(The GLT was originally designed for police work and is currently in the custody of several forces.)

As you'd expect, the handling more than keeps pace with the performance.

Gas shock absorbers, aluminium wheels, low profile tyres, a front spoiler and power-assisted steering give you control at all times.

While stopping is equally predictable. (Thanks to ventilated disc brakes on the front wheels and standard discs on the rear.)

Inside, you'll want for very little.

The standard specifications include a heated driver's seat, sun-roof, rev-counter, and cloth upholstery.

Not to mention 2 door mirrors you can adjust from inside the car.

See it now.

The new Volvo 244 GLT is at your Volvo showroom now.

Although not a limited edition, we plan to import only a few hundred each year.

So if you'd like one, we suggest an early visit.

A car like this is bound to go fast.

THE NEW VOLVO 244 GLT.

THE GLT COSTS £8696 (DELIVERY & NUMBER PLATES EXTRA) PRICE CORRECT AT TIME OF GOING TO PRESS. FUEL CONSUMPTION FIGURES ARE–16.3MPG (17.3 LITRES PER 100KM) URBAN CYCLE. 37.2MPG (7.6 LITRES PER 100KM) AT 56MPH AND 27.4MPG (10.3 LITRES PER 100KM) AT 75MPH. *MANUFACTURER'S FIGURES. FOR THE 1980 EDITION OF 'VOLVO FACTS,' WRITE TO: DEPT. FT20, VOLVO CONCESSIONAIRES LTD, LONDON W13 9JQ. SALES TEL: HIGH WYCOMBE (0494) 33444. SERVICE TEL: IPSWICH (0473) 72026. PARTS TEL: CRICK (0788) 823511.

R-R loses order for Boeing 757 engines

By Michael Donne, Aerospace Correspondent

ROLLS-ROYCE has lost its coveted position as the sole engine supplier to the new Boeing 757 short-range jet airliner.

Aloha Airlines of Hawaii announced yesterday that it is to buy three of the these twin-engined aircraft, but will use the U.S. General Electric CF6-32 engines of 36,500 lbs thrust, instead of the Rolls-Royce Dash 535 version of the RB-211 engines of 37,400 lbs thrust ordered by British Airways and Eastern Airlines

The Aloha deal brings to 48 the number of 757s firmly ordered. In addition to 19 for British Airways and 23 for Eastern there are three on order by Transbrasil of Brazil, all of which specify the RB-211-535 engines. In addition there are options on 45 more 757s, all with Rolls engines.

Rolls-Royce is not surprised by the Aloha decision. The UK engine company has always recognised that sooner or later some airlines would decide in favour of U.S. engines instead of the RB-211.

But the Aloha choice is likely to stimulate a number of other airlines to choose U.S. engines for the 757, and it is now clear that Rolls-Royce has a major competitive battle on its hands.

This makes it all the more vital for Rolls-Royce to ensure that it can deliver its Dash 535 ngines on time, on cost and up to specification.

The reasons for Aloha's choice of engine have not been disclosed officially, but are believed to include the fact that General Electric, as a U.S.-based company, is closer than Rolls-Royce in the UK for such things as overhauls and the supply of spares.

Several other U.S. airlines are known to be considering the 757 with U.S. engines, including such big operators as United, American, Continental and Delta, and further orders are expected to be announced this summer.

Rami G. Khouri writes from Ammen: The state-owned Jordanian airline Alia is putting the final touches to a $398m financing package to pay for six new wide-bodied jets.

The U.S. Export-Import Bank has approved a $276m loan to cover 85 per cent of the $325m cost of the U.S. component of the aircraft Alia is buying — five Lockheed Tristars and one Boeing 747.

The British component of the purchases amounts to $73m for the Rolls Royce RB211 524B engines to power the Lockheed Tristars. The

MAN to start U.S. bus assembly

BY KEVIN DONE IN FRANKFURT

MAN (Maschinenfabrik Augsburg-Nürnberg), one of West Germany's leading truck and bus makers, is to set up its first manufacturing plant in the U.S.

Following the break-down last year of its proposed merger with White Motor of the U.S. for the manufacture of diesel trucks, MAN has finally decided to go it alone with local manufacture in the U.S.

Its first venture will be to set up a plant for the assembly of buses. This opening has been offered by a major new order it has received from the city of Seattle for the delivery of 230 articulated buses. The definitive contract will be signed in the next few weeks and is expected to be worth about DM 100m ($54m).

Herr Wilfried Lochte, the MAN Board member responsible for the truck and bus division, said yesterday that the company had decided to make "a very careful start" with manufacture in the U.S.' with the intention of keeping the initial investment within clear limits.

Although MAN is starting with the assembly of buses, it is still studying closely opportunities for following this later with local manufacture of diesel trucks.

It is establishing a new U.S. subsidiary, the MAN Truck and Bus Manufacturing Corporation, with probable headquarters in Detroit, and is particularly keen to gain a foothold in the U.S. market for Class six trucks—vehicles between 9 and 12 tonnes. More than 50 per cent of the trucks in this weight range are still petrol driven and MAN sees a big market opportunity for its wide range of diesel engine trucks.

The company was mantaining a "flexible" strategy, said Herr Lochte and future U.S. acquisitions could not be ruled out. Nothing was under consideration at the moment, however. "We begin alone. We are concentrating on this more modest approach."

MAN has already had osme success in the U.S. bus market and has delivered more than 400 buses to 11 different cities: among them was a previous order of 150 for Seattle.

MAN is also planning to extend its manufacturing interests in Turkey with the construction of a diesel engine plant to complement its existing truck and bus assembly plant.

It has a 33 per cent share in the assembly plant and a similar share could be expected in the engine plant, which is likely to involve an investment of some DM 50m. A decision to go ahead on this second plant in Turkey is expected in the next few weeks.

In addition MAN is acting as an adviser to both Iraq and Algeria on the building up of their own truck and bus industries. It is still negotiating a further order of 200 double decker buses with the city of Baghdad

U.S. to toughen stand in Tokyo car talks

BY DAVID BUCHAN IN WASHINGTON

THE U.S. intends to get "extremely tough" with Japan in negotiations that resume in Tokyo today over allowing more foreign car imports into the Japanese market, a top White House trade official has warned.

Mr. Robert Hormats, the deputy trade representative, told a Senate subcommittee this week that the Carter Administration was "very disappointed" with lack of progress so far. The Japanese, he said, had proved partially accommodating on the which keep foreign cars out of their market, but were "totally resistant" to dropping the differential on their car sales tax.

This taxes larger cars with engines of more than 2,000 cc at a higher rate (20 per cent) than smaller cars (taxed at 15 per cent), and is thus argued by the U.S. to discriminate against the typically bigger American model.

Mr. Hormats' testimony before the Senate subcommittee, which was investigating the present plight of car dealers, represented a hardening of the administration's line in the prolonged talks with Japan. The trade official also expresed scepticism about the degree of investment in the U.S. that Japanese vehicle manufacturers intend to make.

In contrast to President Carter last week, who was publicly bullish about new Japanese facilities in this country, Mr. Hormats said: "We have some movement but much more is needed." He praised Honda for its firm decision to set up a $200m car manufacturing plant in Ohio, and hoped that Toyota and Nissan would follow suit.

But so far Toyota is only commissioning a study on a new U.S. plant, while Nissan last week proposed a $300m light truck plant. It is car imports, not trucks, that are displacing American products and workers, he pointed out.

"It is puzzling to hear from large Japanese auto concerns that they are unwilling to invest in the U.S. because of the increased competitiveness of U.S. companies when these same Japanese producers are adding capacity in Japan, some of which is likely to produce cars destined for the U.S.," Mr. Hormats said.

Britain confirms £61m grant for Sudan

BY JAMES BUXTON

BRITAIN confirmed yesterday that it is to make a grant of up to £61m to a power generating project in Sudan. The grant, which presents major opportunities to the British electrical generating industry, is the second biggest aid grant Britain has ever made.

The UK will be the biggest contributor to a $276m (£123.6m) World Bank project called Power 3 which is designed to increase Sudan's generating capacit yby 184MW by 1983.

The Overseas Development Administration believes lack of electricity in the capital, Khartoum, is the country's most critical need. Power shortages and cuts have crippled industry, hampered the growth of irrigated schemes, and, in the heat of the summer, caused political discontent, which flared into street disturbances last August.

Under Power 3, Britain will finance a diesel power station of about 40 MW at Burri near Khartoum and a 60 MW steam power station at Khartoum North, both of which will be tied to British companies. The rest of the project consists of increasing the capacity of the Roseires hydro-electric station on the Blue Nile by 84 MW, to be financed by the World Bank, and the installation of a new 150-mile transmission line from the Sennar hydro-electric station to Khartoum, to be paid for by West Germany, which is tocontribute about £25m Sudan is to contribute about £60m to cover the local costs.

Sir British companies and consortia have already prequalified to tender for the Burri diesel station. They are: Humphreys and Glasgow, Taylor Woodrow International, Capper Neill International, Babcock Turnkey Operations, Balfour Beatty, and Hawker Siddeley Power Enginering. The consultant for this station is a West German concern, Lahmeyer.

Ewbank and Partners of Brighton is the consultant for the Khartoum North Station. The contract for Burri is expected to be awarded next January for completion in late 1982, and the contract for Khartoum North next February or March for completion in mid-1983.

Sudan is Britain's largest non-Commonwealth recipient of aid in Africa, after Kenya. Some £15m was disbursed there last financial year.

Zimbabwe buys MF tractors

FINANCIAL TIMES REPORTER

MASSEY-FERGUSON has received an initial order for tractors for Zimbabwe worth $1.7m. Most of the units will be supplied from the UK.

The order was placed by Farm Mechanisation, part of the Barlow Rand grou.. With the ending of economic sanctions last year, Massey-Ferguson renewed its appointment of Farm Mechanisation as sole distributors in Zimbabwe.

The company says that, with the return of normal trading conditions, it anticipates an increasing demand for farm machinery from commercial farms and in expectation that the government will place a high priority on increasing mechanisation of peasant farming.

● A conference for British and European industrialists and businessmen about opportunities in Zimbabwe will be held by London Export Conference on July 17 and 18 at the London Hilton Hotel, in association with Air Zimbabwe and British Airways.

China's first foreign joint ventures approved

By Tony Walker in Peking

CHINA'S Foreign Investment Commission has announced first approvals for joint ventures involving Chinese and foreign partners.

In what a Western lawyer based in Peking last night described as a "most important development," Chinese authorities have agreed to two hotel projects and an airline catering service.

According to the New China News Agency, the hotel contracts have been signed with U.S. and Hong Kong-based companies. The catering deal also involves a Hong Kong-based company. The China International Travel Service is the Chinese partner in the two hotel projects.

One of the hotels is to be built by Zhong Mei Hotel Development of Hong Kong. It will be known as the Jianguo Hotel and will be built in Peking's eastern suburbs. The participants in the joint venture are planning an hotel with more than 500 rooms and luxury facilities.

The other hotel, to be built by the U.S. company, E-S Pacific Development and Construction, will have 1,000 rooms. Both hotels are expected to be open by 1983.

The third contract, between China's national airline, CAAC and China Air Catering of Hong Kong provides for a May starting date.

The announcement of Foreign Investment Commission ratification for the joint ventures has caused a flurry among Western businessmen in Peking. The approvals are regarded as an indication that China is about to give the go-ahead for a number of joint ventures which have been with the commission for some time.

It now seems likely the first batch of joint ventures will get under way without an announcement of regulations governing tax and wage rates.

The Chinese have been promising to publish such regulations since late last year, but for some reason have not yet promulgated them.

Among the joint ventures awaiting final FIC approval is the one involving Schindler, the Swiss lift manufacturer. Approval for that project is expected to be announced in the next batch of joint venture agreements.

W. German direct investment in U.S. soars by 43%

BY ROGER BOYES IN BONN

WEST GERMAN concerns, faced with problems ranging from high labour costs to market saturation, radically stepped up their overseas direct investment last year, especially in the U.S.

Economics Ministry figures show that West German companies increased their direct investment in the U.S. by DM 3.89bn (£893m), a rise of 43 per cent over 1978. Overall private direct investment abroad increased by DM 7.8bn, a 13.4 per cent jump over 1978.

At the same time, foreign investment in West Germany rose by only DM 1.9bn, an increase of only 3.6 per cent over 1978. The biggest investor in West Germany in 1979 was Britain whose companies ploughed DM 363m into the country. Dutch companies followed with DM 358m and Swiss with DM 257m. The U.S. invested only DM 216m in West Germany last year but remains by far the largest overall private investor. American companies have put some DM 20bn into the country since 1961, compared with DM 8.6bn by the next largest investor, Switzerland.

The Economics Ministry figures—and a statistical analysis published yesterday by the Bundesbank—suggests that several trends are at work as far as West Germany's high overseas investment is concerned.

In the first place many companies were worried last year about the weakness of the dollar against the Deutsche Mark and feared that this would lead to West German exports being priced out of the U.S. market. Hence there was a strong move t oacquire subsidiaries in the U.S. to set up direct production facilities and, thus, secure or expand the West German market share of the North American market.

Another strong factor has been the high production and labour costs in some industries, especially the chemicals sector. Since 1952, the West German chemical industry has invested DM 10.4bn abroad, a large portion of this in the U.S. This long-standing trend is clearly continuing, boosted particularly by the high profits attained by the chemical groups. In the last quarter of 1979, Bayer, BASF and Hoechst all announce dplans for growth in the U.S.

The electronics industry has been, after the chemicals sector, the most enthusiastic investor overseas and a number of subsidiaries have been acquired, partly – to acquire know-how in new fields "such as micro-electronics" and partly to secure market presence. Thus in the last quarter of 1979, Siemens announced three separate U.S. acquistions and a fourth through a joint venture already established in the U.S.

Egypt and Israel sign trade regulating accord

CAIRO—Egypt and Israel have initialled and agreement regulating direct trade between them, Mr. Michael Herzberg, the legal adviser to the Israeli Trade Ministry, said yesterday.

The agreement was the fourth to be signed since Egypt and Israel began to normalise relations under their peace treaty earlier this year.

The other three agreements covered cultural co-operation, civil aviation and tourism.

The trade agreement has to be ratified by the Israeli Knesset and the Egyptian People's Assembly (Parliament) before direct trade becomes possible.

Mr. Yoram Ziv, director-general at the Israeli Trade Ministry, led the delegation which negotiated the agreement.

Reuter

Our Amman Correspondent adds: A consortium of eight Arab and European banks have signed a protocol here with the French and Jordanian Governments to lend FFr 290m (£30m) to finance a telecommunications expansion scheme in the rural areas of Jordan.

The package includes a FFr 217m commercial loan Government. The loan is for 10 years at 7.5 per cent interest, with an additional ½ per cent loan insurance charge.

The syndicate of eight banks that put up the money is led by Banque Francaise di Commerce Exterieure, and includes Banque de l'Indochine et de Suez, Banque de Paris et de Pays Bas, Banque Nationale de Paris, Societé Generale, Union de Banques Arabes et Francaises, al Saudi Banque, and Arab Bank.

Oil tanker register promoted

By William Hall, Shipping Correspondent

A GROU called the Oil Companies International Marine Forum (OCIMF) is promoting the establishment of an international tanker register, which would provide information about the world's tanker operators.

Such a register could be established by the middle of next year and it is being seen as a major attempt to outlaw the growing number of sub-standard ships.

The OCIMF represents all the world's major oil companies and represents those bodies responsible for 80 per cent of all oil transported by sea.

Initially, the OCIMF favoured a system of rating international tanker operators on the order of a good food guide, but this foundered because of probable American legal difficulties.

Under the new scheme, which has still to receive approval, a voluntary system to collect and disseminate information concerning tankers, operators, crews, ports and terminals will be established.

There are some 3,300 tankers of more than 10,000 dwt on the high seas. Just under a third are operated by large oil companies, but in recent years there has been a rapid growth in smaller, unskilled operators. The OCIMF estimates that between 5 and 10 per cent of the world's tanker fleet is "sub-standard" and that the percentage is going up.

The information to be considered for entry in the register is under review by five committees. Aside from OCIMF's members, ship classification societies, charterers, and others are represented on these committees.

While the more responsible shipowners support the scheme there remains a certain amount of resistance from some smaller tanker operators that are worried about whether they will be fairly represented. In addition, OCIMF still has to sort out the financing arrangements for any register.

NEW GLEESON SUBSIDIARY

M. J. Gleeson (Contractors) has formed a new subsidiary called Gleeson (London). It will operate from the group head office, in North Cheam, Surrey.

Rebate for Now! advertisers

By Michael Thompson-Noel

NOW! MAGAZINE, Sir James Goldsmith's first venture into UK publishing, failed to meet initial circulation targets and is to pay rebates of 27 per cent to advertisercsc.

The magazine's advertising rate card guarantees average weekly net sales over the first 26 issues of 250,000 copies. In the event, the average was 182,011, according to figures examined by Price Waterhouse and Co., the magazine's auditors.

Mr. Derek Rogers, marketing director of Sir James's Cavenham Communications, has told advertising agencies the audited figure fell "some way short of target," but says it represents "an encouraging level of sales when you consider that one year ago, the market for a news magazine in the UK was thought to be non-existent."

He adds: "Now the debate must be how big the market is and how soon it will be before other titles enter and by so doing enlarge and develop that market."

Cavenham's circulation target for Now! engendered scepticism in the advertising world, which predicts a struggle for survival.

The next sales figures to be published will be those certified by the Audit Bureau of Circulation, covering a slightly different sales period. They are due early next month.

Failure to complete metric changeover economic 'millstone'

BY DAVID CHURCHILL, CONSUMER AFFAIRS CORRESPONDENT

THE GOVERNMENT'S failure to complete the metrication programme in the UK was strongly attacked yesterday by Mr. Max Wood, chairman of the Metrication Board. The Board is to be closed down at the end of the month after 11 years of operation.

Mr. Wood said the Board was concerned "that the remaining metric advances will be piecemeal and that our economy will continue overlong with the costly, inefficient and largely unnecessary millstone of dual working in metric and imperial measures."

The Government announced late last year that there would be no more Parliamentary Orders forcing the adoption of metric standards, supported further voluntary metrication.

Mr. Wood pointed out yesterday the problems industry, retailers, and education will face until the metric programme is completed.

"Industry claims that until metric production is the norm for all but spares and replacements for existing imperial-standard equipment, they will compete at a disadvantage with overseas producers," he said.

He saw little prospect of early progress to full metrication in retailing. "The retail trade is highly competitive and it is argued that, unless everyone changed together, those who stayed imperial would gain an unfair commercial advantage," Mr. Wood added.

He pointed to the anomaly of young people learning metric measures at school only to have t adapt later to an economy that is partly imperial.

New Talbot car prices

TALBOT'S NEW Solara saloon will cost from just over £4,000 for the 1.3 litre to £6,370 for the top-of-the-range 1.6 automatic.

The seven-model range, based on the award-winning Talbot Alpine Hatchback, goes on sale in the UK from May 13. Prices will be: LS 1.3, £4,086; LS 1.6, £4,265; GL 1.6, £4,751; SX 1.6 Auto, £6,370.

Available later in the summer will be: the GLS 1.6, £5,481; GLS 1.6 five-speed, £5,641; and the GLS 1.6 Auto, £5,881.

Levi plans 1,000 jobs in Scotland

By Ray Perman, Scottish Correspondent

LEVI STRAUSS, the U.S. clothing manufacturer, is extending and modernising its Scottish factories as part of expansion which will create another 1,000 jobs by the end of next year.

The company said a year ago that it was investing £7m in Scotland—where it had good productivity and labour relations—to increase output of denim jeans and new products such as sportswear.

Since then a new operational headquarters has been opened at Paisley and Levi has leased a 56,00 0sq ft factory from the Scottish Development Agency at Bothwell Park, Glasgow. The agency is to lend the company a further £2m fgor a second factory at Bothwell Park.

A 53,000 sq ft factory at Inchinnan, Renfrewshire, is being bought from the agency for £750,000, which includes te cost of modernisation work. The agency is building a £1m extensio nto Levi's factory in Dundee.

The company employs 1,400 people in Scotland and also manufactures at Carfin, Lanarkshire, and Whitburn, West Lothian.

Hugh Routledge

Stephenson's Rocket takes to the roads

THE original Stephenson's Rocket, built in 1829, pictured above, left the Science Museum in Kensington yesterday on its first journey away from the museum in almost 120 years.

The locomotive is on loan to the Merseyside County Museums until October, as part of the 150th anniversary celebrations of the Liverpool-Manchester railway.

Under police escort, the Rocket was transported from London via the M1, M6, M62 and M57, at a maximum speed of 20 mph. After transferring to A roads for the final leg of its journey, it is expected to reach the museum in William Brown Street, Liverpool at 12.30 pm today.

Transport is being provided free of charge by McGregor Cory Haulage, part of the Liverpool-based Ocean Group the international transportation distribution, and shipping company.

At Liverpool a welcoming committee, including the Lord Mayor, Councillor Mrs. Doreen Jones, Sir Kenneth Thompson, chairman of Merseyside County Council and Councillor John Last, chairman of the county arts and culture committee, will receive the locomotive.

On the museum steps Sir Kenneth Thompson will present Sir Lindsay Alexander, chairman of the Ocean group, with an inscribed miniature in appreciation of the part played by the group in bringing the Rocket to Liverpool.

The locomotive's protective covering for the journey was designed and constructed by Castree Brothers of Bootle. A clear low density polyethylene, supplied by BXL Flexible Packaging Division based in Liverpool, ensured that the covering is see-through.

The Rocket was one of three locomotives to take part in the Rainhill Trials, held in 1829 by the Liverpool and Manchester Railway Company, to decide the relative merits of locomotives. It alone fulfilled all the trial's conditions.

Frozen food set to became growth area of the 1980s

THE FROZEN food industry in the UK is set to become one of the few growth areas for food in the 1980s in spite of the expected static growth in volume demand for food as a whole during the decade.

Figures published yesterday by Birds Eye, the world's largest frozen food company, show that total sales of frozen foods in 1979 were £920m compared with £790m in 1978.

More important, the Birds Eye figures show that frozen food sales in 1979 increased in volume by some 8 per cent. This is the first significant growth in the size of the frozen food market for several years.

The trade estimates that volume growth will continue in the early 1980s, although at a slightly lower rate than the 8 per cent spurt last year.

This return to volume growth, however, after a decade in which both sales and profitability were sluggish, could not have come at a more appropriate time.

Since 1980 is both the 50th anniversary of the marketing of the first frozen foods and the silver jubilee of that stalwart of the industry—the fish finger. Some 1.2bn fish fingers are now sold every year.

The man responsible for making frozen foods commercially viable was an American biologist and inventor called Clarence Birdseye.

Birdseye's hobby was fur-trapping in the frozen north of America and, like others including the Eskimos, he was used to eating fish and caribou which had been naturally frozen but was still edible when thawed out some time later.

Birdseye began to realise the commercial possibilities of quick freezing foods for sale. After svereal years of experiments to reproduce mechanically the natural freezing conditions of the Arctic wastes, in 1924 Birdseye developed a quick-freezing device which is still used today.

Like many inventors, Birdseye was faced with the dilemma of marketing his invention himself or selling to a larger company. In 1929, however, he decided to sell his frozen food technology — for some $22m — to a fast growing U.S. company called Gneral Foods.

What immortalised his work was the company's decision to take his name, split it into two, and use it as their trademark. Thus Birds Eye was formed.

The first frozen foods were put on sale in March 1930 in Springfield, Massachusetts. However, frozen foods did not really come to the UK until after the Second World War, when Unilever acquired the Birds Eye name outside the U.S.

During the 1950s and 1960s, frozen foods became a high-growth market as increasing living standards and developing technology made the processin gand distribution of frozen foods more efficient and more homes had refrigerators.

Yet, the rapid growth of the market attracted numerous operators and led to considerable over-production. Moreover, by the 1970s, consumers were becoming more sopphisticated about frozen foods and wary of the low quality produced by some companies.

Thus, the last decade has seen the classic situation of too much production chasing a static market. The inevitable result was low profit margins for the major companies and many smaller companies going out of business.

Yesterday Mr Don Angel, Birds Eye chairman, warned that "anyone who now thinks that cold stores are filled with pots of gold is in for a shock." He said that profit margins were still inadequate and "even large and distinguished companies are finding it uncomfortably difficult to achieve reasonable levels of profitability in frozen foods."

Birds Eye is also cautious about the reasons for last year's volume growth, pointing out that the severe winter last year meant that fresh foods were les savailable and consumers turne dto frozen foods instead.

This caution is tempered by several reasons why frozen food sales can be expected to show a consistent volume growth during the 1980s.

Probably the main reason for optimism is the increasing willingness of the major multiple supermarkets to stock more frozen foods. Since the bulk of food shopping is through multiple grocers, they obviously have a large say in determining what is bought simply by making the products available

According to Birds Eye, the multiple grocers now account for some 46 per cent of frozen food sales, with specialist freezer centres selling 18 per cent of the total, independent grocers' 12.5 per cent, and the co-ops 11.5 per cent.

It is the small independent grocer, however, whose sales are being hit most by the extra sales through multiple supermarkets.

Another reason for optimism within the industry is the steady growth of home freezer ownership. More than 42 per cent of households now own a domestic freezer, according to Birds Eye. In 1979 some 1.27m freezers were sold for the home, compared with 1.16m in 1978.

Birds Eye also reveals that, for the first time, more frozen food is bought by domestic freezer owners than by non-freezer owners. In 1979, freezer owners spent £368m on frozen foods compared with the £342m spent by non-freezer owners. The remaining £210m represents sales through caterers.

Birds Eye estimates that by 1984, freezer owners will be responsible for about 70 per cent of the volume of frozen foods sold in the UK.

The basic reason for growth in the 1980s will be the continuing trend towards convenience foods as more women go out to work and as living standards rise. Birds Eye's figures show that the proportion spent on basic frozen foods—such as peas and fish fingers—is declining as people spend more on ready meals and other new products.

NEWS ANALYSIS. David Churchill, Consumer Affairs Correspondent, looks at the multi-million pound frozen food industry.

Edwardes paid £57,200 in 1979

BY KENNETH GOODING, MOTOR INDUSTRY CORRESPONDENT

SIR MICHAEL EDWARDES, BL chairman and chief executive, had a pay increase of nearly 9 per cent last year, from £52,500 to £57,200.

This is shown in BL's annual report sent to shareholders yesterday.

Sir Michael's pay compares with the £84,726 salary of Sir Terence Beckett, Ford of Britain chairman, a 10.8 per cent increase on 1978.

The BL report gives some indication of the cost so far of restructuring which involves cuts or closures at 13 factroies and the loss of at least 25,000 jobs.

The 1979 provision was £18.7m, including £9.2m for car operations and £8.2m for plant closures within Aveling Barford, the ailing construction equipment offshoot.

This compared with £31.6m in the 1978 accounts, which took in an estimated £11m for closure of the AEC truck plant at Southall and £20.6m for rationalising certain UK foundry and manufacturing operations and eliminating some loss-making overseas operations.

BL Lseems to have taken a cautious view of restructuring costs. It was able to add back £10.9m last year (£10.6m in 1978) from provisions made in previous years but no longer required.

Of the £10.9m, some £8.4m was over-provision in 1977 for car manufacturing in South Africa. These were to have been sold and £17.1m provision wasm ade. The negotiations foundered and the subsidiary has rationalised during 1979.

BL says the Southall provision "has proved adequate," but the balance remaining has been held over until the site is sold.

The accounts show the extent of financial problems within Aveling Barford, which was up for sale for some time. The construction equipment trading loss reached £12m on sales of £48m, against a £5m loss on sales of £57m in 1978.

Prestcold, the commercial refrigeration concern BL also attempted to sell, produced a £2m trading profit on sales of £66m compared with a £1m loss on sales of £61m in 1978.

As reported, the car operations had sales of £2.060bn (£2.173bn) and a trading loss of £45m (profit of £63m). The commercial vehicles business had sales of £633m (£570m) and a trading profit of £11m (£12m).

The report confirms that the car companies "demanned" by about 10,000 jobs and BL Commercial Vehicles by 5,000 jobs "without significant internal disputes and achieved greater productivity compared with 1978." Total manpower was reduced by 18,500 jobs to 168,561 at the end of December 1979.

Managers' pay, Page 10

Docks Board profits down by 10% after 1979 strikes

BY WILLIAM HALL, SHIPPING CORRESPONDENT

THE OPERATING profits of the British Transport Docks Board, which controls a quarter of UK port traffic, fell by 10 per cent to £26.8m last year.

The overall tonnage of traffic through the group's 19 ports, which range from Southampton to Troon in Scotland, rose by 4.2 per cent to 82.2m tonnes. However, revenues grew more than twice as quickly to a record £133.6m.

Last year's road haulage strike and engineering strike hit the board badly, causing a £5m loss in revenue, virtually all of which was profit.

This year, the steel strike has lost the nationalised ports body £4.5m in revenue, but some of this is being recovered because of a surge in steel imports.

All of the board's ports last year produced net profits before xtra dpreciation for inflation. Sixteen made net profits after additional depreciation. The exceptions were Hull, which was badly hit by the road hauliers strike, Cardiff, which was hit by the closure of the East Moors Steelworks, and Southampton, which is suffering from heavy financing charges.

After aditional depreciation for inflation of £10m and interest of £6.5m, the board which has been self-financing since 1972, made pre-tax profits of £13.6m It repaid £10.8m of loans and invested £13.9m.

The Government has said it would like private capital introduced into the Docks Board. Sir Humphrey Browne, the chairman, said yesterday a Bill to implement the Government's wishes would probably be introducer in the next session of Parliament. If all went well it would be on the statute book next year, and a share flotation could occur any time after that. Kleinwort Benson are advisers to the Docks Board.

The Board's return on capital fell from 16.9 per cent to 15.1 per cent during 1979. Five years ago the Board had agreed o target rate of return of 20 per cent by 1980 but Sir Humphrey said yesterday that this had assumed more rapid growth than had occurred, and would not be attained.

Containers

The tonnage of ores moving through the oBard's ports rose by 16.4 per cent to 10.8m tonnes last year and timber traffic was up by 16.8 per cent at 1.2m tonnes. Traffic also rose substantially by 42 per cent in import/export cars.

Container and roll-on/roll-off traffic rose by 5.6 per cent during 1979 and Southampton has re-established itself as one of the country's leading container ports. Apart from one short unofficial stoppage Southampton had no strikes last year and several new services started using the port, which employs almost a third of the Board's workforce.

Of the group's other large ports, Immingham has established itself at the main UK port for exports to China — general cargo traffic with China increased by a third last year.

As a result of the steel strike this year the Board is wary of forecasting the outcome for 1980. In thet short term, any sanctions imposed on Iran could affect trade through Newport in South Wales, which handles Talbot car exports.

Matsushita to double TV output in Britain

Financial Times Reporter

MATSUSHITA ELECTRIC, the Japanes consumer electronics group, yesterday announced plans to almost double its output of colour televisions in the UK by expanding capacity at its Cardiff subsidiary.

A third 60,000 square foot factory is being built in Cardiff at a cost of £2m. Matsushita makes music centres, radio tuners and televisions there under the National, Panasonic and Technics brand names.

The expansion will consolidate Japan's strong position in the British television industry. Five Japanese companies already have manufacturing operations in the UK and a sixth, the Victor Company of Japan (JVC) has been negotiating the purchase of Decca's television interests.

Hitachi and Toshiba have set up joint ventures in the UK with General Electric Company (GEC) and Rank respectively. Matsushita, Sony and Mitsabishi are running independent operations. Sony's UK subsidiary recently won a Queen's Award for Export Achievement.

The company intends to increase colour television output to 120,000 units a year. The additional sets will be mainly 26-inch models intended for export to Continental markets, notably West Germany, France and Italy.

Last week Thorn EMI, the biggest of the manufacturers which are still wholly UK-owned, announced agreement in principle to manufacture in Britain video discsa nd players designed by JVC.

The new Matsushita factory is due to start production by the beginning of next year. It will provide about 140 jobs initially, rising to about 300 in three years. The two existing factories employ 400 people.

Mr. Shunji Matsuoka, managing director of Matsushita (UK), said the new investment would create substantial opportunities for British component suppliers. The company was already buying up to 70 per cent of its components by value from more than 40 British companies.

Exports by the Cardiff plants fell last year to about 18 per cent of production. Mr. Matsuoka said among the reasons for this were the strength of sterling and the changing pattern of demand on the Continent in favour of the 26-inch set. The market for audio equipment was "not so good."

Miami air link battle hearings open

By Michael Donne, Aerospace Correspondent

THE battle between Laker Airways and Air Europe for rights to fly the London (Gatwick)-Miami air route opens in London today, when the Civil Aviation Authority starts public hearings into both air-service.

Originally, there was a third applicant for the route, British Caledonian Airways, but the airline withdrew following the recent award of rights for the Hong Kong route, on the grounds that it had enough new ventures to cope with.

London-Miami is a "dual designation" air route—it can be served by two airlines from each country. The present UK operator is British Airways.

The existing U.S. operator is Pan American. Several U.S. airlines, including Eastern, Braniff and Air Florida are competing to become the second U.S. operator.

The route has become popular with UK holiday-makers in the past year or two, and already there is a substantial volume of charter as well as scheduled traffic.

Air Europe says that the route would be worth an overall $160m annually in fares, and that it would operate four return flights a week in the first year, rising to six flights a week in the summer, together with charter services.

Mr. Martin O'Regan, chief executive of Air Europe, says that it would expect to be able to carry 93,000 passengers in the first year, rising to nearly 150,000 within three years. The route would become profitable by the end of the second year.

Air Europe would offer a one-way fare of £95 Standby in the off-peak period from October 1 to June 30, but it would also offer a £155 single Economy Class fare off-peak and £185 single in the peak period, with a Vacation Rate of £105 single off-peak rising to £135 single in the peak period.

Laker Airways' interest in the route is also strong. It recently was not only denied its bid for the Hong Kong route, but was also refused rights to a substantial number of European short-haul routes from Gatwick.

● Brymon Airways, the rapidly-expanding West Country airline, is to take over Plymouth Airport from the local authority o na 125-year lease from May 1. The company plans to lay another hard runway, improve existing terminal buildings and instal new hangers and other facilities.

The takeover is part of a major investment programme which includes purchase of two new de Havilland Canada 50-seat Dash Seven four-engined short take-off and landing aircraft, costing a total of about £7m including spares.

House building 'could be lowest for 50 years'

BY MICHAEL CASSELL

THE NUMBER of houses built in Britain this year could be the lowest for more than 50 years, according to the National Housebuilding Council, the house building industry's consumer watchdog organisation.

Sir Peter Trench, the council's chairman, said in London yesterday that without a dramatic improvement in the rate of output, work was unlikely ot begin this year on more than 105,000 private sector homes against 140,000 starts in 1979. Some builders are known to doubt whether even the 100,000 mark will be reached.

Completions of private housing in 1980 may, Sir Peter added, only reach about 115,000 compared with nearly 133,000 last year.

With public sector house building now at one of its lowest-ever points—starts this year are expected to fall well below the 1979 total of 80,000 —overall housing output could decline to a level unknown since the 1920s.

After a period of high profitability for the house-builders, house prices were stabilising while building costs were rising sharply. The resulting squeeze on margins was expected to begin to bite over the coming months, though the industry does not believe the true extent of the difficulties will show until next year.

Sales remained encouraging, however, though mortgage finance costs and shortgages have led growing numbers of intending purchasers to withdraw.

Sir Peter said the situation could begin to improve—though not in time to affect this year's output — once interest rates started to fall. The building societies would then attract more funds for lending and more home buyers could contemplate purchases.

The underlying state of the housing industry was healthier than it had been in 1974, when at times over 50,000 homes were unsold. Today, the figure was likely to be nearer 20,000 and fewer bankruptcies would therefore occur.

Sir Peter said he was approaching the chairmen of 100 of the country's largest companies to suggest ways in which they could, for little cost, provide temporary assistance to employees

Steel scrap companies warn of switch from rail to roads

BY ROY HODSON

MOVEMENT OF steel scrap will be switched from the railways to the roads unless the Government authorises early investment in new railway facilities, scrap reclamation companies say. It would involve up to 2.5m tonnes of steel scrap a year.

The companies say their patience is exhausted after two years of talking to Government departments and British Rail.

A report before leaders of the British Reclamation Industries Confederation at their annual meeting in London yesterday says the situation has reached crisis point. Many of the 38,000 small rail wagons (16 tonnes capacity) used for scrap movements have reached the end of their working lives or need extensive repair.

A £30m scheme to provide 1,600 51-tonne capacity airbrake wagons has been discussed, but general support is still lacking.

The scrap companies want British Rail to provide the replacement wagons. There is some sympathy for this from public and private sector steelmakers which buy the scrap, but British Rail is anxious that the parties concerned examine other options, including private ownership of wagons, leasing, pool companies or other sharing systems.

"None of these appeal to the scrap industry," said the British Scrap Federation.

The possibility of obtaining EEC or British Government grants is being considered.

The reclamation industry is taking a gloomy view of prospects for scrap deliveries by rail.

The report says: "It does seem quite clear that unless an early decision is taken and the necessary capital investment authorised, a good deal of existing investment in rail facilities by scrap processors and steel works will be wasted."

South Wales and South Yorkshire will be worst affected in terms of real congestion if scrap steel is increasingly sent by road.

State technology policy criticised

BY JOHN ELLIOTT, INDUSTRIAL EDITOR

THE GOVERNMENT'S refusal to expand State aid for high technology ventures was criticised yesterday by Mr. Geoffrey Chandler, director general of the National Economic Development Office.

Speaking a week after Sir Keith Joseph, Industry Secretary, sejected calls for State intervention in developing industrial robots, Mr. Chandler said the Government should provide more resources for industry.

"Automation, robotics, computing and telecommunications systems, and the potentially all-pervading micro - electronic technologies, need to be diffused throughout industry," Mr. Chandler told the Westminster branch of the British Institute of Management.

"The sustaining of research and development for these at company level at a time of recession is something the Government can legitimately assist, as indeed a number of our competitors are doing."

CONSENSUS

The Government should provide additional resources "in a manner which helps to diversify and strengthen the forces for decision making, to fill the gaps in the market our competitors are filling more successfull, to assist in the taking of risks, and to be the mid-wife of corporate change."

These statements are in line with remarks Mr. Chandler has made before and is now repeating at a time of growing concern about the impact of economic problems on companies' technological research.

Mr. Chandler said Britain needed, a consensus on how to tackle economic problems. "We are a tightrope walker on the frayed rope of past industrial performance, unable to agree on repair of the rope or the provision of a safety net."

CEGB move for water reactor station

THE CENTRAL Electricity Geenratig Board took ts first firm step to acquir a pressurised water reactor nuclear power station. It issued a letter of intent to the National Nuclear Corporation, which oversees the nuclear construction programme, authorising it to begin design and manufacture of the nuclear steam supply system for the American-resigned reactor.

The corporation needs this letter of confirmation for its licence agreement with Westinghouse, the U.S. company providing technology for the 1,100-megawatt reactor, expected to be Sizewell, Essex.

The CEGB move is in line with last December's statement by Mr. David Howell, the Energy Secretary, committing the Government to a 15.000-MW nuclear expansion programme in the decade from 1982.

Coal use 'will not drop in 1990s'

SLOW PROGRESS in expansion of the nuclear power industry meant that a decline in coal burned for electricity in the 1990s was highly unlikely, the National Coal Board said. Mr. Robert Alexander QC, in his closing speech for the NCB at the Vale of Belvoir coalfield inquiry, said even full implementation of the Government's positive industry policy, building one power station a year for a decade from 1982, would provide only 22 gigawatts of nuclear energy by the year 2000.

This compared with earlier Department of Energy projections of 40 gigawatts, he said, and already it seemed unlikely that the first of these stations could be started in 1982.

Banking support moves criticised

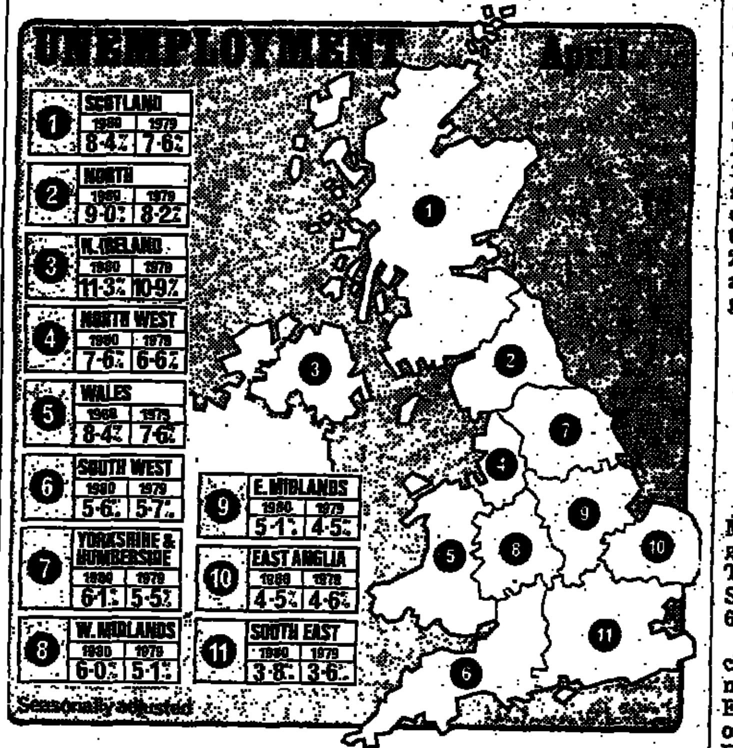
THE GOVERNMENT'S intention to continue to provide unlimited lending of last-resort facilities to the banking system as a routine matter each day is criticised by the stockbrokers W. Greenwell.

In their latest monetary bulletin, the brokers discuss the proposal to continue this support as set out in last month's joint Treasury and Bank of England consultative Green Paper on monetary control. The firm criticises the intention to provide unlimited regular support for the money market, and says that the central bank should control supply of reserves in the monetary system directly.

Interest rates fall 'unlikely'

AN IMMEDIATE fall in interest rates is unlikely, says Mr. Robin Leigh-Pemberton, chairman of the National Westminster Bank.

The bank has predicted that bank base rates for overdrafts, currently 17 per cent, could start to decline by June-July and reach 13 to 14 per cent by the end of the year. Mr. Leigh-Pemberton said at the annual meeting of the bank that an early fall was unlikely because of high rates overseas, particularly in the U.S., and "domestic uncertainties."



Factory areas show jobless rise

BY OUR ECONOMICS CORRESPONDENT

THE RISE in unemployment since last summer has been largest in regions where there is a heavy concentration of manufacturing industry.

While the number of adults out of work in the UK has risen by 15:4 per cent since last September, when the national upturn began, the rises have been more than 20 per cent in the East Midlands, Yorkshire and Humberside.

Above average increases have also been reported in other major manufacturing areas, West Midlands, North-West, North and Wales.

This ties in with the view that manufacturing companies under tight financial pressures have been laying off workers and have been reluctant t o replace those who have left.

Surprisingly, the increase in Northern Ireland since last September has been only 8.8 per cent although the percentage rate there, 11.3 per cent, is well above the 6 per cent national average.

There has, so far, been little difference in the rate of increase of unemployment between men and women. The male percentage of 7.1 remains considerably higher than the female rate of 4.5 per cent.

Alastair Roger dies at 64 in Zimbabwe

Financial Times Reporter

MR. ALASTAIR ROGER, governor of Globe Investment Trust, has died in hospital in Salisbury, Zimbabwe. He was 64 and unmarried.

Mr. Roger, who was also chairman of Temple Bar Investment Trust and a director of Electra Investment Trust, was oua visit to Salisbury to inspect Electra's interests in Zimbabwe.

In the last few years Electra Group Services, the management company which runs Globe, Electra and Temple Bar, has gained a wide reputation in the investment trust world for its imaginative approach to the problems of the sector.

Among Mr. Roger's other appointments was the deputy chairmanship of the British cirtel Ec tida yds vbg cmfwbg Electric Traction Company.

Advertising talks

OFFICIALS from the Office of Fair Trading held top-level talks with the Advertising Standards Authority about its refusal to monitor advertisements which give misleading price comparisons. Under the price marking legislation introduced last summer, retails of most consumer goods are forbidden to make price comparisons with manufacturers' recommended or other unsubstantiated prices.

Good prices for Islamic items

SOTHEBY'S week of sales of Islamic items has been proceeding much better than might have been expected. Forecasts have been marked down, but even so, apart from poor demand for Qajar lacquer, where in the past Iranian buying inflated prices, the auctions have gone well.

SALEROOM

BY ANTONY THORNCROFT

Not surprisingly the Mughal items, most collectors of which are European, are the best feature. Two illustrations from the Jami al-Tavarikh of Rashid al-Din, late 1590s, did particularly well, with Colnaghi acquiring two miniatures, for £27,000 and £24,000 respectively.

Calligraphy also did well, a Qajar Koran of 1866, with 253 leaves, selling for £25,000, against a cautious estimate of about £1,000. Spinks paid £14,000 for a good *Firdausi Shahnama* of about 1580, with

BASE LENDING RATES

A.B.N. Bank	17 %	¶ Hambros Bank	17 %
Allied Irish Bank	17 %	■ Hill Samuel	§17 %
Amro Bank	17 %	C. Hoare & Co.	†17 %
American Express Bk.	17 %	Hongkong & Shanghai	17 %
Henry Ansbacher	17 %	Industrial Bk. of Scot.	17½%
A P Bank Ltd.	17 %	Keyser Ullmann	17 %
■ Arbuthnot Latham	17 %	Knowsley & Co. Ltd.	19 %
Associates Cap. Corp.	17 %	Langris Trust Ltd.	17 %
Banco de Bilbao	17 %	Lloyds Bank	17 %
Bank of Credit & Cmce.	17 %	Edward Manson & Co.	18 %
Bank of Cyprus	17 %	Midland Bank	17 %
Bank of N.S.W.	17 %	■ Samuel Montagu	17 %
Banque Belge Ltd.	17 %	■ Morgan Grenfell	17 %
Banque du Rhone et de la Tamise S.A.	17½%	National Westminster	17 %
Barclays Bank	17 %	Norwich General Trust	17 %
Bremar Holdings Ltd.	18 %	P. S. Refson & Co.	17 %
Brit. Bank of Mid. East	17 %	Rossminster	17 %
■ Brown Shipley	17 %	Ryl. Bk. Canada (Ldn.)	17 %
Canada Perm't Trust	18 %	Schlesinger Limited	17 %
Cayzer Ltd.	17 %	E. S. Schwab	17 %
Cedar Holdings	17 %	Security Trust Co. Ltd.	18 %
■ Charterhouse Japhet	17 %	Standard Chartered	17 %
Choulartons	17 %	Trade Dev. Bank	17 %
C. E. Coates	17 %	Trustee Savings Bank	17 %
Consolidated Credits	17 %	Twentieth Century Bk.	17 %
Co-operative Bank	*17 %	United Bank of Kuwait	17 %
Corinthian Secs.	17 %	Whiteaway Laidlaw	17½%
The Cyprus Popular Bk.	17 %	Williams & Glyn's	17 %
Duncan Lawrie	17 %	Wintrust Secs. Ltd.	17 %
Eagll Trust	17 %	Yorkshire Bank	17 %
E. T. Trust Limited	17 %		
First Nat. Fin. Corp.	19½%		
First Nat. Secs. Ltd.	19 %		
Robert Fraser	18 %		
■ Antony Gibbs	17 %		
Greyhound Guaranty	17 %		
Grindlays Bank	‡17 %		
■ Guinness Mahon	17 %		

■ Members of the Accepting Houses Committee.
* 7-day deposits 15%, 1-month deposits 15¼%.
† 7-day deposits on sums of £10,000 and under 15%, up to £25,000 15¼% and over £25,000 15½%.
‡ Call deposits over £1,000 15%.
§ Demand deposits 15%.

UK NEWS – LABOUR

Pay offer opposed at NatWest

BY NICK GARNETT, LABOUR STAFF

THE EXECUTIVE of the National Westminster bank staff association yesterday overturned a decision of its management committee and decided to recommend rejection of the 18-21 per cent pay offer to clerical *staff in the five English clearing* banks.

This could create difficulties in wage negotiations for the banks' 200,000 clerical and management staff.

The association's executive *made it clear yesterday* that the decision was a result of the local pay differentials settlement for bank messengers achieved this week after industrial action by the Banking, Insurance and Finance *Union.*

The bank staff association's management committee had sent out a circular last week arguing that the clearing banks' pay offer should be accepted.

Its executive said yesterday, however, that the position had now changed because of "uncertainty" following the messengers' settlement and the likely level of the main pay *claim for messengers.*

The NatWest messengers' dispute concerned local relativities and was not connected with the annual pay negotiations for technical and services staff, which covers the messengers.

The five clearers, including NatWest, are expecting this claim to be lodged within the next few days.

The NatWest messengers' settlemlent includes provision *for substantial increases for* young messengers with experience, which the staff association thinks compare favourably with the rises offered to clerical staff.

Staff associations at Barclays and Lloyds are to meet today, and a joint meeting of staff associations will take place on Friday to discuss pay. The banking union said yesterday it would *formally reject the clerical staff* pay offer.

Our Belfast Correspondent writes: A threat by 5,000 bank staff in Northern Ireland to ban transactions between the Province and Great Britain *from today has been called off* while a new pay offer is put to a ballot.

The Irish Bank Officials Association said after talks in Belfast that its present ban on handling currencies in the European Monetary System (EMS) would continue until the result of the ballot was known in about 10 days.

The four main banks—the Northern, the Ulster, Allied Irish and the Bank of Ireland—put forward new proposals which included establishing a joint committee to review industrial relations in the banks.

They offered a 20 per cent salary increase, with an agreement for further increases linked to rises in the retail price index.

The dispute was sparked by a claim for a lump sum payment *of 12 per cent of salary* to compensate for extra work resulting from the break in parity between sterling and the Irish punt when Ireland entered the EMS.

The latest offer includes a *lump sum in the form of a back-*dated salary increase for the six months up to last March 1. This is equivalent to about 10 per cent of salary.

Scottish TUC hits as Tory rule

BY CHRISTIAN TYLER, LABOUR EDITOR

SCOTTISH trade unionists, historically among the most militant in Britain, yesterday counted what they saw as the cos to their region's economy on Prime Minister Mrs. Margaret Thatcher's first year in office.

Delegates to the 83rd annual meeting of the Scottish TUC, were told that things would get worse before they got better. *Mr. David Basnett,* of the General and Municipal Workers' Union, said there would be no Government U-turn of the Heath variety and that there were "four hard years" ahead.

This admission, from one of the chief proponents of the U-turn theory, summed up the mood of yesterday's economic debate—a mood of defiant aceptance not of Conservative policies but of the fact of a Conservative Government.

The British TUC's day of action in three weeks' time was held out as an early opportunity for Scottish trade union tacivists to demonstrate their frustration at rising unemployment and prices and diminishing industrial aid and social services.

Moderates like Mr. Basnett and Mr. Tom Jackson of the Union of Post Office Workers, were to the fore in their condemnation of the Government's *economic management.* However, Mr. Michael McGahey, Communist president of the Scottish miners, was predictably more explicit.

May 14, he said, must be the start of a process, a "democratic process," of using all *means available to bring about* an early General Election defeat of the Government and to replace it with a government committed to socialist policies.

He said the miners nationally would not accept any pit closures caused by the troubles of the steel industry or by the importation of coal.

Despite the vigour of the Scottish TUC's verbal attack on the Tories, *there was little* detailed discussion of the right programme for Labour—although the eight points of the "alternative strategy" were spelled out in one of the resolutions carried.

AUEW rejects industrial action

BY ALAN PIKE, LABOUR CORRESPONDENT

THE AMALGAMATED Union of Engineering Workers' national *committee decided yesterday* that industrial action was not an appropriate weapon to use against unemployment.

Right-wing delegates at the committee meeting in Blackpool deleted a reference to industrial action from a resolution which also calls for a vigorous campaign, including demonstrations, lobbies and a national day of action to demand cuts in unemployment.

Left-wing delegates were afraid that, if the reference to industrial action disappeared, it would be more difficult to mobilise AUEW members in support of the TUC's day of action against Government policies on May 14.

But Sir John Boyd, general secretary, warned that, if the union had a general policy of industrial action against unemployment, the executive would have no licence but to support any future action which might be proposed in the TUC.

Unless the phrase was deleted, the AUEW would be "bludgeoned into supporting anyw ild, woolly proposals that emanate from particular sections of the TUC general council."

Mr. Terry Duffy, president, said afterwards that the 29-23 vote against including the reference to industrial action would not alter the union's position towards the May 14 demonstration. The executive has sent a circular to district secretaries *calling on all members* to respond to the TUC's appeal for maximum involvement by trade unionists "so as to ensure that the day of action will be a resounding success."

Mr. Michael Towey, a Birmingham delegate, said in the debate that in his area the day of action was not getting the support he would like, because AUEW members had not received a specific instruction to stop work.

Mr. George Anthony, a Left-winger who fought to keep the reference to industrial action, said the union must, if necessary, be prepared to fight in support of its demands for a reduction in unemployment. There was no suggestion that industrial action should be taken lightly. But, if employers were not prepared to listen to arguments, the union must have the option open.

Union challenge to Pay Research Unit

BY PHILIP BASSETT, LABOUR STAFF

UNION officials representing 100,000 professional civil servants yesterday declared that the Civil Service's Pay Research Unit comparability system should be ended as soon as possible.

The Institution of Professional Civil Servants' stand, coupled with the strong *possibility that the Civil and* Public Services Association will also oppose PRU at its conference next month, suggests that more than half of all 600,000 white-collar civil servants may withdraw from the present pay agreement.

Such a move by the two large unions would probably be followed by similar decisions by unions linked to them, such as the Inland Revenue Staff Federation, and others disaffected with this year's PRU findings, such as the Civil Service Union.

A withdrawal could precipitate a serious split in the ranks of the unions' National Staff Side, since the second-largest union, the Society of Civil and Public Servants, whose members do relatively well out of PRU, is unlikely to join forces with the IPCS and CPSA.

Withdrawal from PRU by two large unions could leave the Government with the task of finding a pay system for the service which would be acceptable enough to the unions to stave off repeated bouts of industrial action but without building in the likelihood of even larger pay settlements.

● The Government yesterday refused to expand its confirmation that it is considering ways to cut the size of the Civil Service.

Union leaders pressed Mr. Paul Channon, Civil Service Minister, and senior officials of the Civil Service Department, to confirm, repudiate or correct recent Press reports, which have included the abolition of the grade of under-secretary and even of the whole Civil Service Department, and a new round of cuts to reduce the size of the service to 600,000.

Mr. Channon said no firm proposals had yet been drawn up and that unions would be fully consulted when they had been.

The unions said the Minister's response was "thoroughly unsatisfactory."

Dispute hits more newspapers

By Pauline Clark, Labour Staff

UNION LEADERS and employers in the national dispute about print craftsmen's pay made further attempts to sort out their differences last night as another newspaper group became a casualty of industrial action.

The Journal of Commerce, *the Liverpool-based shipping* newspaper, Freighting World and the three weekly newspapers in Liverpool, Widnes and Runcorn stopped publication yesterday because of the effects of actio nby National members. All the papers are printed by Swale Press at Widnes.

Swale Press issued protective notices to its 120 staff to come into effect on Friday.

The decision follows last week's announcement by Bristol United Press that it was suspending publication.

● One of Britain's biggest printing firms sacked 130 workers yesterday. NGA staff at Norprint, of Boston, Lincs., started a work-to-rule three weeks ago. It became a strike at the weekend.

Managers' real pay down

BY PAULINE CLARK, LABOUR STAFF

MANAGERS' pay rose by 21.5 per cent last year, but remained significantly lower in real terms than in 1974, says a salary survey published yesterday by the British Institute of Management.

The survey of more than 36,000 salaries of executives in 395 companies showed a rise in managers' earnings of 4.9 per cent at 1979 constant prices. It pointed to an increasing trend toward payment of bonuses as part of total earnings, particularly as company performance-related bonuses.

Managers' average net real pay was put at just under 7 per cent lower than in January 1974, compared with a fall for the average wage-earner of 2 per cent.

The survey said that earnings were showing signs of worsening as a combined result of price rises and progressive taxation.

An example was given of a manager earning nearly £10,000 gross in January 1975 whose net real pay since was cut from £6,362 to £5,511, at constant prices, a drop of 12.7 per cent.

On the outlook for 1980 the survey says that despite official calculations of increased disposable income last year, due mainly to tax changes, inflation is catching up again, and increases in real earnings were already severely eroded *before* the Budget.

"In the face of certain recessiona nd higher unemployment, it is highly unlikely that manual workers' earnings can go on outstripping clerical and managerial pay?whether managearial earnings will keep pace wil depend on how far and fast their companies can adapt and improve efficiency in a falling economy."

Contrary to the findings of a similar survey in 1979, it was found that the higher the level of manager, the lower the gross salary increase.

A further factor was undoubtedly "need to restore differentials for the lowest level of management over earnings of clerical and manual workers," both of which rose faster in 1978, the Institute said.

The trend towards bonus payments showed that 55.3 per cent were earning bonuses against 52.4 per cent last year and 35.8 per cent in 1978.

Provision of company cars for supporting managers increased to 51 per cent of the total surveyed, compared with 45 per cent previously. This, it said, was offset to some extent by Budget changes.

While the same proportion of companies in 1979 and 1980 were said to have reported recruitment problems (22 per cent) the number who expressed difficulties about retaining management *staff fell sharply,* from 12.3 per cent to 5.3 per cent.

UK NEWS—PARLIAMENT and POLITICS

Reducing inflation 'must remain first priority'

BY IVOR OWEN

REDUCING THE level of inflation must remain the Government's first priority, the Prime Minister insisted in the Commons yesterday when she came under renewed attack from the Opposition benches over the rising level of unemployment.

When asked by Mr. David Steel, the Liberal leader, for her reaction to the announcement earlier in the ady that over 1.5m people were now out of work—the highest April total recorded since the War—she said: "One is always very worried about increases in unemployment."

Labour backbenchers shouted: "Why don't you do something about it?"

Mr. Steel suggested that North Sea oil revenues should be used to run the economy at a higher rate of activity than was possible under existing Government policies.

Mrs. Thatcher replied that revenue from North Sea oil went into the Exchequer in the ordinary way.

She pointed out that 401,000 people were now being assisted by special employment measures, compared with 248,000 12 months ago.

Mr. James Callaghan, the Opposition leader, challenged the Prime Minister over comments made by Mr. John Biffin, chief secretary to the Treasury, admitting that there was no mechanistic and demonstrable link between a movement in the money supply and a reduction in the rate of inflation.

Amid cheers, he asked why, in the light of this statement, the Government was subjecting the country to such a savage rate of increase in unemployment.

Mrs. Thatcher described Mr. Biffin's speech as "excellent" and quoted a passage in which he emphasised that Government policies must be adhered to.

Mr. Callaghan then asked why, if unemployment was part of Government policy, it had been decided to reduce the level of unemployment benefit.

The Prime Minister replied that the main aim of Government policy was to reduce the level of inflation—unless this was done, the level of unemployment in the long run could not be reduced.

She explained that unemployment benefit was being increased "slightly below the level of the increase in prices," pending the introducton of taxation of short-term benefits.

Mrs. Thatcher again condemned the "day of action" planned by the TUC for May 14 and assured Mr. Peter Bottomley (C., Woolwich West) that ayone who did strike that day would not be entitled to any social security benefit.

STEEL: "1.5m out of work"

Callaghan battle on Finance Bill

By Ivor Owen

MR. JAMES CALLAGHAN, the Opposition leader, looks like winning his battel to get the Government's public expenditure plans debated on the floor of the Commons in advance of the second reading of the Finance Bill.

This seems the most probable outcome of inter-party talks which followed last week's heated clash between Mr. Callaghan and Mr. Norman St. John Stevas, the Leader of the Commons, who suggested that the discussion on the Finance Bill should take precedence.

Mr. Callaghan then warned that such a procedure would result in Labour MPs adopting "go slow" tactics to impede the passage of the Finance Bill. It is now expected that the Government's public expenditure White Paper will be debated in the Commons soon after the Ma yDay Bank Holiday.

Prior pressed on strike ballots

BY JOHN HUNT, PARLIAMENTARY CORRESPONDENT

WEAK NATIONAL leadership at Westminster has encouraged union leaders to abuse their power, Mr. John Browne, (C., Winchester), claimed in the Commons yesterday, when he introduced a Right-wing Tory clause to make unions hold secret strike ballots when a minimum of 15 per cent of their membership called for it.

He and other Tory "hawks" on the backbenches were putting pdessure on Mr. James Prior, Employment Secretary, to accept the principle of strike ballots.

Mr. Browne, speaking during the report stage of the Employment Bill, urged Mr. Prior to meet to strong feelings of Conservative backbenchers on this issue.

He wanted the Government to change the Bill at a later stage in the House of Lords or introduce separate legislation on union ballots during the present Parliament.

"Trade union rank and file and the majority of our fellow countrymen expect such a commitment," Mr. Browne insisted.

He agreed that the Tory Right-wingers would eventually like to see the Government introduce a full mandatory strike ballot, without the 15 per cent qualification.

The present backbench proposal was a "mere mouse" and was the first step towards the mandatory secret ballot which "Conservative members and Conservative voters expect of this Government."

Mr. Browne called on the Government to restore sanity to industrial relations. The details in the new clause were not sacrosanct. It was the principle of the secret ballot that he and his friends felt so strongly about.

The sentiments in the clause had been approved by the Conservative Trade Union National Conference on three occasions, the last time by a vote of 500-3.

Mr. Browne insisted that the suggestion in the new clause was not for a mandatory ballot at this stage, but for a voluntary secret ballot triggered from the shop floor.

He did not believe that this would provide a panacea for stopping all strikes, but it might prevent some of them.

The true blame for chaotic industrial relations, demoralised management, low productivity, and high unemployment lay "right here in this House." Said Mr. Browne: "This is where the blame for weak leadership must lie. This is where the answers must be found.

"There are many trade union leaders who preach democracy but so few of them actually practise it. Many of them practise a form of partial or complete dictatorship under a veil of democracy.

"A man must be all but a hero to lead a vote by a show of hands against his union leaders' recommendations at a mass meeting.

"The result of the last general election convinced me that the majority of our fellow countrymen and trade union rank and file expect the present Government to induce the unions to accept democracy."

Mr. Ian Mikardo (Lab., Bethnal Green and Bow) described Mr. Browne's speech as "a lot of garrulous nonsense."

It bore all the hallmarks of theory rther than practical experience. It frequently happened that workers voted against going on strike, said Mr. Mikardo. In the National Union of Mone Workers no strike took place without a secret ballot.

He said there were similarities between the Tory backbench proposal and labour relations law in America. But in the U.S., the number of days lost per million workers was five or six times higher than in Britain.

Mr. Mikardo also warned: "If you have to have a ballot to start a strike, you would have no authority to end it without a balot."

This was so in America, where they often had great difficulty in getting men back to work because of the legislation which the Tories seem to be applauding.

Mr. Robert Dunn (C., Dartford) supported Mr. Browne and proposed a separate new caluse which would make unions hold a secret ballot after a strike had been called. The decision to strike would have to be validated by a simple majority of those voting.

Mr. Dunn called on Mr. Prior to become a pilgrim and join those on the road to the promised land.

"He will then strike a chord that echoes from our House, from our party to the majority of people beyond," he said.

Mr. Dunn recalled that a Tory supporter had recently advised him that Mr. Prior should get his spinnaker up and sail with the wind that was blowing his way. Mr. Dunn hoped that the Secretary of State would do just that.

Te emphasised that the Conservative Party should not draw conclusions in Opposition which it then denied in Government.

Clegg under fire from Tory MPs

BY IVOR OWEN

PROFESSOR HUGH CLEGG, chairman of the pay comparability commission, received a vote of sympathy and thanks from Mr. James Prior, the Employment Secretary, when he came under further attack from Tory MPs i nthe Commons yesterday.

Professor Clegg was called a "dangerous old luny" by Mr. Jock BruceGardyne, (C., Knutsford), who has been leading the clamour from the Tory backbenches for the winding up of his commission.

Mr. Prior said he felt sorry for Professor Clegg, who came under fire when the Commission produced a report recommending settlements at a lower level than had been expected, and who was also criticised, when, as in the case of teachers' pay, the recommendations were regarded as too high.

Professor Clegg was in a position "not unknown to some people"—where he could not win.

This comment was interpreted by Labour MPs as a reference by Mr. Prior to his own position, as he battles to preserve his "softly, softly" approach to the reform of industrial relations against pressures—from within the Cabinet as well as from Tory backbenchers—for the adoption of more hardline tactics.

Mr Prior explained to Mr Bruce-Gardyne who shouted: "In Heaven's name, why?" when tald that the Government was keeping the future of the Commission under review, that Professor Clegg and his colleagues still had a number of outstanding references to deal with.

"After that we shall reconsider wkhether to keep the Commission going," the Minister promised.

Study on ambulancemen's reports

BY ROBIN PAULEY

AN URGENT study is to be undertaken by the Department of Health and Social Security to find the best way of persuading ambulancemen to provide written information about patients they take to hospital.

Sir Patrick Nairne, Permanent Secretary at the DHSS, told the Commons Select Committee on the Parliamentary Commisioner for Administration (acting as Health Service Commissioner) that there was a problem of transmission of information by ambulancemen.

The ambulance service handled about 1.5m emergency calls a year. Although the DHSS hahd produced a model form for written reports in conjunction with the ambulance services, only about half of the 45 services in England were using it.

A fast 12-week study would be undertaken to analyse which authorities were not providing written information and why. On the basis of that a revised form might be produced.

It was hoped that trade unions would co-operate. There had been industrial action last year in the ambulance service, which had not helped the use of orms, but Sir Patrick said he hoped any former unwillingness by unions to co-operate would disappear.

Use of the forms did not put ambulancemen under any legal liability for whatever they wrote down. It was merely an extension of their present verbal reports.

Mr. Antony Buck, chairman of the committee, said he could sympathise with ambulancemen when he looked at the present detailed and complicated model form. It should be possible to provide something simpler, he said.

Mr. Cecil Clothier QC, the Commisisoner, had detailed two complaints in his 1978-79 report in which patients died after collapsing, being taken to hospital and then being discharged the same day.

In both cases the ambulancemen said they gave details of the collapses to the nursing staff but in both cases the nursing and medical staff could not recall what, if anything, they had been told.

Mr. Clothier said it was "vital" to get round any problems so that more effective transmission of information preferably written, could be ensured.

NHS reform 'undemocratic'

BY ROBIN PAULEY

GOVERNMENT PROPOSALS for reform of the National Health Service will reduce local authority involvement in local health authorities and thereby fail to ensure democratic control of the health service at the local level, says the Association of Metropolitan Authorities.

In its response to "Patients First," the Government's consultativepaper on the structure and management of the NHS in England and Wales, the AMA says the plans also fail to ensure that community health services are afforded the importance and significance they deserve.

The AMA welcomes the principle of abolishing the existing area health authorities and replacing them with district health authorities. But the local authority representation of a third on AHAs will be reduced to a fifth on the new DHAs if the proposals are implemented.

"There is an irrefutable case for local authority nominees to comprise the majority of DHA members. This would be the most practical way of ensuring democatic control of the health service at the local level," says the AMA, which represents the London boroughs plus the metropolitan areas of Merseyside, Greater Manchester, West Yorkshire, South Yorkshire, Tyneand Wear, and West Midlands.

The AM says the importance of community services is underestimated. "Ninety per cent of health care takes place outside hospitals but there is little in the consultative paper which acknowledges the role of community services. Steps should be taken to ensure that senior personnel and the district reams are not simply hospital personnel under new titles."

Policemen's right to speak out

By Our Own Correspondent

THE RIGHT OF chief constables to speak out in public on matters affecting police policy was defended yesterday by Mr. Alan Goodson, Chief Constable of Leicester and the current President of the Association of Chief Police Officers.

"The policeman," hesaid, "is inevitably today very much at the heart of the major problems on the domestic scene—criminal law reform, industrial relations, public order, violence, race. They generate intense public debate, and the police service cannot escape being part of that process.

"Is it any wonder that we are being driven out of our silent shell, are being pitched into the public forum and compelled to raise our voices lest our interests are drowned in the unchallenged chorus from the public commentators?"

Mr. Goodson, speaking at a conference of ACPO with editors from the media, said: "Some people are worried that the police are, it is said, beginning to shape the very nature of public opinion on important questions. And why not! In our own field we are professionals . . . and we shall continue where we deem it appropriate to have our say."

Mr. William Whitelaw, the Home Secretary, said in reply that he personally welcomed the idea of chief constables speaking out in public on policing in a modern society.

Recruiting executives

BY OUR LOBBY STAFF

THE GOVERNMENT has agreed to continue financing the initial Professional and Executive Recruitment Service operated by the Manpower Services Commission—at least until September 1981.

In reply to a question from Mr. Andrew Bennett (Lab., Stockport North), Mr. Jim Lester, under-secretary for Employment, said that the Government had endorsed the MSC's proposal that a specialist public employment service should continue to be provided at the professional and executive levels.

The Commission would, he said, make a further full review by the autumn of next year.

Substantial changes are to be made to the service which now has 36 branches and cost £2.8m to finance in 1978-79.

Over the next few years, PER staff of about 800 will be cut also be made by cutting back by around 300. Economies will from the existing computer matching of jobs and vacancies. A weekly newspaper will be introduced to take over some of the functions now handled by computer.

The PER was set up in 1973 as a fee charging service. It is self-financing on the recruitment side but Government money is needed to finance some of its other activities like retraining and the registration of unemployed people.

EUROPEAN OPTIONS EXCHANGE

Series		April Vol.	April Last	July Vol.	July Last	Oct. Vol.	Oct. Last	Stock
ABN C	F.280	5	15	—	—	—	—	F.296
ABN C	F.300	6	6	—	—	—	—	"
ABN C	F.310	20	3.50	—	—	—	—	"
AKZ C	F.22.50	42	2.70	—	—	—	—	F.4.40
AKZ C	F.25	91	1.30	70	1.60	—	—	"
AKZ C	F.27.50	23	0.60	44	1.20	—	—	"
AKZ C	F.30	12	0.10	—	—	—	—	"
AKZ P	F.22.50	2	1.20	—	—	—	—	"
AKZ P	F.25	59	2.50	—	—	—	—	"
ARB C	F.60	—	—	2	6	—	—	F63.10
ARB C	F.65	2	2.20	—	—	—	—	"
ARB C	F.70	36	1	—	—	—	—	"
HEI C	F.65	24	3.50	—	—	—	—	F.61.80
HEI C	F.70	7	2.20	2	3.30	—	—	"
HEN C	F.60	—	—	1	6.80	—	—	"
HO C	F.20	5	0.70	—	—	—	—	F.18.50
IBM C	$55	2	2⅛	—	—	9	5.12	$51⅛
IBM C	$60	10	1	1	2⅛	—	—	"
IBM C	$65	5	½	—	—	—	—	"
KLM C	F.60	27	3.90	30	4.90	—	—	F.60.80
KLM C	F.70	36	1.60	39	2.60	—	—	"
KLM C	F.80	23	0.40	81	1	—	—	"
KLM P	F.60	102	5.10	—	—	—	—	"
KLM P	F.70	49	11	—	—	—	—	"
KLM P	F.80	37	20.50	—	—	—	—	"
NN C	F.100	—	—	1	17	—	—	"
NN C	F.110	—	—	1	9	—	—	F.114.80
NN C	F.115	7	4.10	—	—	—	—	"
NN C	F.120	8	1.70	44	3.20	—	—	"
NN P	F.110	6	2.20	8	3.30	—	—	"
NN P	F.115	—	—	2	6.50	—	—	"
PHI C	F.17.50	1	1.90	98	2.10	—	—	F.19
PHI C	F.20	44	0.60	10	1	3	1.40	"
PHI C	F.22.50	8	0.20	50	0.40	—	—	"
RD C	F.150	22	7.50	3	10	—	—	"
RD C	F.160	35	3.80	4	6.10	14	8.60	F.158
RD C	F.170	465	1.40	34	3	—	—	"
RD C	F.140	27	2.50	14	5	—	—	"
RD P	F.145	15	5	35	7.20	—	—	"
RD P	F.150	13	7.50	3	10	—	—	"
RD P	F.160	8	10.80	—	—	—	—	"
UNI C	F.115	27	3.10	3	5.60	—	—	"
UNI C	F.120	21	1	—	—	—	—	F.113.30
UNI P	F.110	12	6	—	—	—	—	"
XRX C	$50	10	3¼	—	—	—	—	$49¼
		May		Aug.		Nov.		
BAZ C	$25	15	8	—	—	—	—	DM33⅞
BAZ C	$40	10	5	—	—	—	—	"
OXY C	$30	—	—	6	½	—	—	"
SIE C	DM.240	4	19	—	—	—	—	"
SIE C	DM.260	4	3	—	—	—	—	DM257.50
SLB C	$120	—	—	—	—	1	7	$103⅛
VEB C	DM.160	—	—	5	1.80	—	—	DM155.50
		June		Sept.		Dec.		
GM C	$45	10	⅛	—	—	—	—	$39⅛

TOTAL VOLUME IN CONTRACTS 2165

C=Call P=Put

Benefits of shop floor contribution

THE INSIGHT which the British working man has into the operation of his company should be used far more extensively to improve the overall performance of industry, Mr. John Nott, Trade Secretary, said yesterday.

Speaking at the Mach 80 machine tool exhibition at the National Exhibition Centre, Mr. Nott said that while he continued to oppose the "extension of the institutional power of the trade unions" the shop floor had a great deal to contribute.

THE MANAGEMENT PAGE

EDITED BY CHRISTOPHER LORENZ

Packing quality into British industry's survival kit

Christopher Lorenz on a new study which examines the reasons behind the UK's industrial decline and offers a recipe for recovery

"In the industrial leagues of the EEC and OECD, Britain has been relegated to the Second Division. A major reason for its industrial decline has been its inability *to* introduce commercially viable new products and processes, and its consequent inability to compete not only on the basis of price, but also of quality. Technical innovation is an essential feature in competitiveness."

This depressing analysis represents the central conclusion of a major new study of Britain's industrial and economic performance, to be published tomorrow by Macmillan*. The purveyor of gloom is Keith Pavitt, senior fellow of the Science Policy *Research Unit (SPRU) at the* University of Sussex, who is the book's editor and its co-author, with several of his colleagues at Sussex.

If Britain's industrial decline is to be halted, let alone turned round, the study argues, industry must reverse its policy of recent years, and maintain a steady and expanding commitment to *research, development and* innovation. Governments should mobilise a wide range of measures, it suggests: "neither Thatcherite policies of non-intervention aid cuts, nor the radical alternative of across-the-board protection, will get to the roots of the problem."

The 353-page volume is un**usual in several respects, com*pared with the welter of* recent reports on British manufacturing, from sources as diverse as the Cabinet's Advisory Council on Applied Research and Development (ACARD), the Confederation of *British* Industry, the National Economic Development Office, and the Finniston Committee on Engineering Education.**

***Not only does the SPRU* study present analyses of the performance of 11 different industrial sectors, but it links these to chapters on various aspects of Britain's overall industrial performance compared with other countries over more than a century. It analyses in depth the close relationship between innovation and export competitiveness and it challenges the traditional economists' view of innovation as a consequence of economic growth; instead, it argues that innovation is also one of the fundamental causes of economic growth.**

The book concludes with advice to government, including a call for active government support for industrial innovation, so as to help close the productivity gap between Britain and its EEC partners *by the end of* the century. And it presents a concise compendium of suggestions of how industrial management can remedy the most important deficiencies at company level. In edited form, this advice *is* reproduced below.

Six vital ingredients in successful innovation

THE NEED for greater innovation in British industry is by no means confined to high-technology sectors. Many traditional ones will only survive in the face of intensifying international competition if companies within them develop more sophisticated skills in design, production and marketing.

This is one of the most fundamental implications of the extensive and depressing sector-by-sector analysis contained in the *SPRU book (see above).*

In a chapter directed specifically at top management Dr. Roy Rothwell emphasises, however, that Britain's weaknesses in innovation are *neither* universal nor irremediable.

In particular, he pays tribute *to the steady* commitment of the chemical industry to innovative activities — and its consequent international competitiveness. He also praises "the considerable British achievement in technical innovation and competitiveness in coalmining machinery."

In general, however, considerable changes will have to be made in management attitudes and actions if other sectors are *to recover and survive,* Dr. Rothwell suggests.

First of all, British managers must recognise the problem, and develop the *will* to innovate. This means that managers must lengthen their time horizons, he argues, balancing immediate profit against long-term viability.

There also needs to be more balance in top management skills. For example, in the textile industry, a growing number of accountants in top-level decision-making has in some cases resulted in *a* neglect of investment in technical development. In the mini-computer *industry,* a *preponderance* of engineers in top-level decision making has led to over-engineering.

"A balance in top management skills is most likely to lead to *a* balance of functions, the achievement of which is so crucial to the firm's long-term success. More qualified engineers are needed in the British engineering industry, especially—as in West Germany and Sweden—in positions of management responsibility. There is a concurrent need for more management training to produce qualified managers with a high level of competence.

"*In many instances, the* 'makeability' of Britis hgoods seems to be dismally poor. This is *probably related to the* relativel low level of qualifications of British production engineers, and to poor communications between R & D and design, on the one hand, and production on the other.

"Probably because of an historical bias towards once-captive Empire markets, many British firms have failed to establish marketing networks to discover users' needs and have instead clung to a traditional 'we know best' attitude towards the market.

As a result, "they have failed to detect often obvious demand shifts. The organisation of *effective* marketing, selling, distribution and after-sales service networks in carefully *selected areas will be crucial* to the future success of those parts of British industry which *currently lack them.*

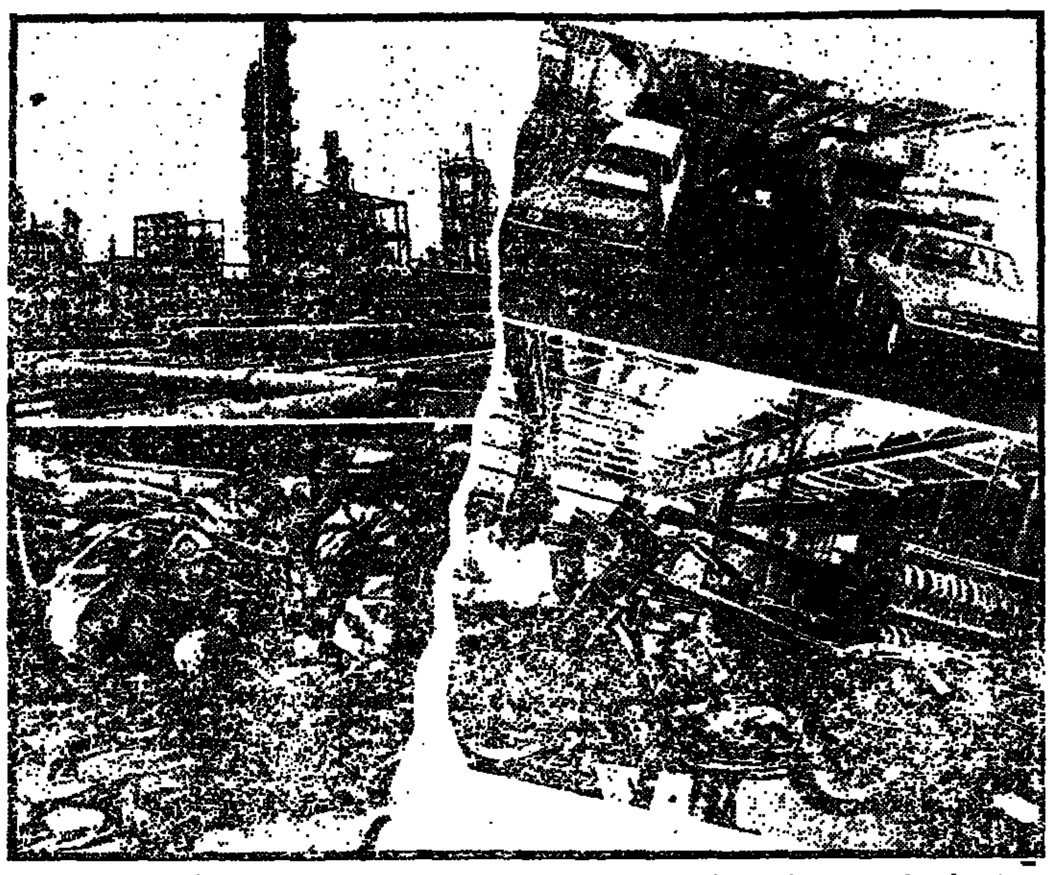
"The root of many of the problems of British management *is lack of professionalism.* While chance and uncertainty can upset even the best-laid schemes, and while no firm is immune from major changes in the economic environment, the success or failure of innovations and of firms rests squarely on the shoulders of the firms' management.

"The factors associated with the successful management of innovation are in no way *unique. They are* all general management skills—holding a balance and achieving co-operation *between the* different corporate functions, proper management of people, proper management of resources, etc. The point about the management of innovation is that it places *greater demands* on the application of these skills, since it involves the management of *change* and change in *all* the functions of the firm, from R and D right through to marketing and sales and beyond.

"The need for these skills is not restricted to high-technology industries, chemicals, machinery and durable consumer goods. The capacity for traditional industries to survive, *in the face of competition from* the newly industrialising countries, will depend on their *ability to adapt and to develop* more sophisticated design, production and marketing skills.

"A recent report on the British footwear industry by the UK Government (Footwear Industry Study Group, 1977) concludes that the industry has weaknesses in: . . . marketing and product strategy, design and design management, exporting, financial control, production planning and control . . . The areas *listed are all ultimately* the responsibility of company managements, and . . . the *solution . . . lies in strengthening of management generally.*

"While much of British industry has been run by managers possessing few, if any, formal technical or managerial skills. our major competitors' industries have been controlled more often by trained managers possessing a range of such skills. It might be that, as in English cricket, in British *industry the days of the* amateur are numbered."



Contrasts in Britain's international competitiveness: chemicals and mining machinery on the plus side (left), *with cars and motorcycles generally telling their own sad story*

So how should companies improve their general "professionalism," and in particular their management of innovation? Drawing on a wide range of American, British and other European studies over the last 15 years, Rothwell concludes that six factors are especially crucial to successful innovation:

1. CORPORATE COMMITMENT TO INNOVATION

This implies recognition of the importanceof innovation in international competition, and the commitment of sufficient resources to innovate activities. Rothwell points in particular to therecord of the UK mechanical engineering industry, whose innovative commitment has been *declining rapidly compared* with that of its main competitors—as has is trade performance.

The corporate commitment must include the realisation that, whether in mechanical engineering or elsewhere, the decline in innovation "cannot be explained away as an inevitable and automatic consequence" of slower rates of economic growth, argues Rothwell.

"There is evidence that, in a number of areas, British *management has sacrificed long*-term viability for short-term profits." He cites research which found that Swedish industrialists, for example, give greater priority to long-term growth and investment than their UK counterparts. And he also points to the 1975 report by the Boston Consulting Group on the failure of the British motorcycle industry. This also found an emphasis on short-term *profitability at the expense of* longer-term aims, so that ". . . profitability, the central short-term objective to which these policies have been directed has in fact deteriorated in the longer term to levels that now call into question the whole viability of the industry."

Again, a recent report on the British machine tool industry reached similar conclusions: "The UK industry's failure to *supply British firms* with the NC (numerical control) machine tools they have increasingly been wanting to instal is a direct consequence of the short-term strategies the machine tool firms pursued in the 1960s. British machine tool firms were most vulnerable to major trade recessions because they were, comparatively, technically backward — both in terms of the designs of the machine tools they produced, and of the processes by which they produced them. . . . They were, therefore, unable to compete effectively against their chief international rivals. . . . This technical "*inefficiency" can be accounted for* by the failure to invest in research and development or in *new machinery. . . .*"

"It does, of course, help firms faced with such drastic changes to have corporate and product development strategies that deliberately explore future opportunities and threats and outline the firm's response to them." Rothwell comments before turning to his second key characteristic of technically progressive companies.

2. INNOVATION AS A CORPORATE-WIDE TASK: NEED FOR BALANCE

"Successful innovating firms in general out-perform unsuccess*ful ones in all functions.* Success generally does not depend on doing one or two things brilliantly, but on doing everything competently and in a properly balanced and coordinated manner.

"In the UK, there has been a failure to achieve a balance among the different corporate *functions, which may explain in* part the relatively low productivity in British R and D activi*ties. In the high technology* sectors, there has often been too much emphasis on 'technology push,' to the neglect of production and marketing." This argument is enlarged upon in the book's chapters on the defence industries, nuclear power and electronics.

By contrast, in several of the *weaker sectors — particularly* mechanical engineering it has often been assumed that 'British is Best,' and that old designs, coupled with incremental change, are good enough. There has been a failure to respond to major technical advances made by foreign competitors. Technology-push has been weak, *phenomenon closely related to* the small number of well-qualified engineers in the British engineering industries, in comparison with those of other countries."

3. EFFICIENT DESIGN AND DEVELOPMENT WORK

"Successful innovation requires efficient development work and, in particular, the elimination of technical defects preferably by the prototype or pilot stage, and certainly before commedcial launch. Evidence (in the) book suggests that such efficiency may be impaired in the UK as a consequence of the same duality between what might be described as the scien*tifically and technically* over-endowed high-technology sectors, on the one hand, and the *technically starved sectors. of* mechanical engineering, on the other."

4. MARKETING AND USER NEEDS

"The marketing function and close contact with users are critical to successful innova*tion," argues Rothwell.*

"There may have been a *general failure* in British industry to understand users' needs that great emphasis has been *placed on the price of* British goods, whereas *quality* is important in determining competitiveness. For example, British textile machinery producers ranked sales price of greater importance than did the machinery users; machinery users, on the other hand, ranked overall running costs of greater importance than *did machinery* producers. Overall running costs are clearly related to reliability *and to performance* — in other words to technical quality.

"In addition, there has some*times been a failure to establish* comprehensive marketing networks and to back up products with a high standard of technical service (parts, spares, etc.). This has certainly been evident in . . . some areas of textile machinery. The British motor cycle industry also failed to offer satisfactory after-sales support for its products.

"By no means all of British industry has found itself unable or unwilling to adapt to changing market and economic circumstances. . . . Coalmining machinery manufacturers have consistently updated the design and performance of their *machinery to meet* the requirements of the National Coal Board; the gas industry, using *its considerable* technical capability, showed itself capable of reacting quickly to adapt successfully to changed circumstances.

"One reason for the failure of British management to recognise the need to updated products, and to make strenuous efforts to detect and meet changing user needs, is a heavy reliance on sales to the old Empire markets.

"As a result of fairly easy sales in these once-protected markets, UK management has often failed to see the need to update products and to produce new generations of products. UK trade has suffered not only in the advanced economies, but more recently in traditional British markets as well, in the face of strong competition, based on technically superior products, from other advanced nations.

"This was clearly the case in the weaving sector of the UK textile machinery industry, and it is mainly in the new areas of *textile* machinery (tufting, texturising), where there was no tradition of sales to the *Empire markets, that UK firms* have performed best. The UK forklift truck industry is similar. It is a post-war industry, which operates in a diversity of markets.

"In both cases, management has generally been aware of the need to produce goods of high technical quality, to provide customers with the goods they wanted, and to mount the right sort of technical back-up operation."

5. GOOD COMMUNICATION

Successful innovation needs good internal and external communication: efficient communication links must be established between the functionally separate departments within the firm, between the firm and outside sources of *science and technology, and* between the firm and customers. This requires an open-minded, consultative and outward-looking style of management.

Wtihin British firms, one important problem is the lack of communication between design and produtcion. It is well known that productivity in the UK manufacturing industry is lower than in major competitor countries. This is related not only to the relatively low level of adoption and use *of modern production* machinery in the UK, but also to an inability of British management to link R&D and design to production. In the textile machinery industry, for example, one major UK firm discovered that one of its products contained 50 per cent more labour input than the same product made by a major US company. In contrast to the American machine, the UK *machine had not been designed* with efficient *series production* in mind."

In the forklift truck sector, Rothwell suggests, the 'makeability' of U.S. trucks is greater than that of their UK equivalents, because the U.S. com*panies linked design much more* closely with production. "The U.S. firms were also more successful in incorporationg a level of flexibility into the mass-production sequences through some modularisation in production; they thus succeeded in obtaining the maximum variety in output with the minimum of com*ponents. Inflexible production* sequences can pose a serious barrier to the incorporation of technical innovations; there is some evidence of this happening in the UK tractor industry."

6. MANAGEMENT: SKILLS AND PROFESSIONALISM

"The establishment in a firm of all the above features of successful innovation cannot be *divorced from general manage*ment skills, from the existence of technically qualified managers at all levels of the firm, or from a deliberate policy of management recruitment and training.

As other chapters of the book point out in detail, British management falls a long way short of this specification, by comparison with other countries in Western Europe. "The proportion of graduates in manage*rial and technical functions is* lower, as are the status of engineers and the level of technical qualifications of graduate managers.

"One sector stands out in contrast to this general picture: the British chemical industry, where a high percentage of managers are graduate scientists or engineers. This is consistent with the relatively strong commitment of the British chemical industry to innovate activities over the past 10 years. These factors are much more widespread in Germany (and neighbouring countries with similar traditions) where graduate engineering training and technical excellence are given much greater weight by management than in the UK."

** Technical Innovation and British Economic Performance. Edited by Keith Pavitt. Price £20. Macmillan Press, 4, Little Essex Street, London, WC2R 3LF. Tel. 01-836 6633. Telex 262024.* ... ...

Business courses

Strategy and Management of the Research and Development Function, *London.* **May 12-14.** Details from Bakkenist Management Consultants, Emmaplein 5, 1075 AM Amsterdam, Netherlands.

Quality Assurance in the Service Industries, London. May 29. Fee: £50 (plus VAT). Details from the Institute of Quality Assurance, 54 Princes Gate, Exhibtion Road, London SW7 2PG.

International Programme for Senior Executives, Switzerland. June 9-13. Details from Centre d'Etudes Industrielles, 4 chemin de Conches, 1231 Conches-Geneva, Switzerland

Introduction to Technology Forecasting, Bradford. June 19-20. Fee: £110. Details from Course Director of Technology Management Programmes, University of Bradford Management Centre, Heaton Mount, Keighley Road, Bradford, West Yorkshire BD9 4JU

***Solving Problems* by Simulation,** Bristol. June 24. Details from P-E Consulting Group, Park House, Egham, Surrey

The Fundamentals of Finance and Accounting for Non-Financial Managers, Brussels. June 23-27. Details from Management Centre Europe, avenue des Arts 4, B-1040 Brussels, Belgium

Management Team Building, London. June 23-24. Details from Eurotech Management Development Service, 13 Holder Road, Aldershot, Hampsire GU12 4RH

Improving the Skills of Women who Sell, London. June 23. Fee: £65 (plus VAT) members, £70 (plus VAT) non-members of the Institute of Marketing. Details from The College of Marketing, Moor Hall, Cookham, Maidenhead, Berkshire SL6 9QH

LOMBARD

An idea behind its time

BY DAVID MARSH

THE LAW of Institutionalised Foot-Dragging has a special application in the field of monetary affairs. ThTis states that proposals for innavtions requiring a high degree of international consensus often start to pick up momentum only around two years after they should have been introduced, and about 12 months after they actually ceased to be necessary.

The law should be amply demonstrated at the meeting of finance ministers making up the interim committee of the International Monetary Fund in Hamburg this week. They will be holding another wearisome round of discussions on the IMF's long-running plan for a Special Drawing Right substitution account.

Many participants, including several important officials from the host country, are clearly going to Hamburg aware that the SDR discussions may largely be a waste of time.

Alternatives

The idea behind the plan is to lower painlessly the international reserve role of the dollar by offering diversification-minded central banks alternative investments—bonds of practically limitless maturity issued by the IMF and denominated in SDRs.

The scheme aims to please everyone. The U.S. would not actually suffer the irritation of dollar withdrawals, since dollars exchanged by central banks for the new SDR assets would still be placed, this time by the IMF, in U.S. Treasury bills. Diversifying central banks would gain the advantage of an allegedly more stable asset. The reluctant reserve currency centres — West Germany, Switzerland, Japan, the UK—would be shielded from disruptive diversification flows into their currencies.

Times have changed, however, since the scheme was first propounded. The SDR account might have been of some use in 1978, when diversification out of the dollar had a plainly disruptive effect on exchange markets. In 1980, however, turbulence has been caused by flows *into* the dollar—set off by the Fed's hard money policy and the improved U.S. balance of payments. It would be madness for finance ministers to give the green light to a scheme which, by providing an international subsidy to encourage reserve flows into the U.S., would actually prolong the run into the dollar.

The last few weeks have brought increasing recognition that a multi-currncey reserve system can, under certain conditions, actually help to stabilise exchange markets.

Germany, Japan and Switzerland recently have been only too happy to encourage reserve diversification out of the dollar, in order to prop up their currencies, and the U.S. has been building up substantially its own D-mark reserves through intervention to hold down the dollar.

The underlying fall of some $10bn in Germany's reserves this year provides another reason why warmth for the SDR scheme may be lacking in Hamburg. The British Treasury, for one, has been banking on a big contribution for the account from the Federal Republic. But Bundesbank officials are now making clear that the availability of German dollar reserves has become much more limited.

Confidence

This is not the first time that monetary reform proposals have advanced to the decision-making stage long after the immediate need for them has evaporated. The 1977 agreement to protect Britain from the running down of the sterling balances was reached only once the pound was starting to become attractive again as a reserve asset. The IMF's Witteveen facility to help deficit countries was set up when Euromarket liquidity was becoming so great that IMF credits were no longer in strong demand. Both these arrangements, even if they were not actually implemented, were however, important purely in boosting confidence. The SDR scheme, on the other hand, would be of little use merely as a safety net. Now that the U.S. really seems to be running a tough monetary policy, the crutch offered by the substitution account can surely be thrown away.

The luxuriance of the cherry

GARDENS TODAY

BY ROBIN LANE FOX

THERE CAN never have been a better fortnight for the spring blossom. No rain, no clouds: the evenings have been luminosu and the folds of white flowers on the plum trees have stood out against the living green of their young leaves.

Any fruit tree will light up this time of year for you—pear, plum or the delicate pink of the almond. But none is so luxuriant as the cherry. I have two pleas to make on its behalf by way of a start.

Please do not plant any more of those heavy double pink varieties which find their way into streets and then spread like measles into the nearest front gardens. The one called kanzan is too much of a good thing for any considerate gardener. Its flowers are thick and sugary and the tree is stiffly shaped, like a cone turned upside down.

You may be more tempted by it this year, when its flowers could be seen against the clear blue skies which set it off rather better in its native Japan. I am not alone in thinking its colour harsh, but gardeners will often play safe when faced with a long list of names, let alone with names like those in a Japanese export-drive. They choose the one they know, forgetting why they know it. I suppose, therefore, I may have ensured the survival of kanzan by mentioning it at all.

Please think twice, also, before you decide to plant a flat-top variety. When mature, they are more common than you might imagine. Last week, I discovered this.

I found myself with a dented motor-mower and no hope of having it mended without going to the black market and finding a foreman at home with as many spare parts as spare hours. He lived in one of those suburbs of the early 1950s whose bungalows would have looked like packing-cases if their occupants had not prospered more than the designers had ever thought they ought to and enlivened them with coach-lamps and the wilder sort of balustrading.

Some 30 years ago, down the roadsides, they had planted lines of flowering cherries in varieties which never rise much above 6 feet, though their trunk thickens out to a wide diameter and their head of branches fans sideways to a flat 10 feet. Like the bungalows, these cherries looked as if they were still waiting for a second storey. Perhaps the neighbourhood picnicked beneath them at sunset and sported like urban elves.

So much for my complaints. If I had any more room for new cherries, I would only plant white-flowered varieties, I told myself, but just to prove that, like you, I never do what I say, I have gone and bought two pink varieties because their trees were so well advanced and reasonably priced. I excuse myself, however, because they were the plain pink form of the subhirtella variety.

The Japanese prunus subhirtella, in its autumn and winter flowering form, will soon have to be re-named phewhatascorcha as the longest-running recommendation of this column. Thetrouble is that it gives such long-running value. The light flowers open in late autumn, and survive for a second show after all but the sharpest winter fronts. They then sprout short stems and come back for a third attempt among the young leaves in April, when the spring weather is as mild as this year's.

They are a superb variety for cutting and using indoors, and cman be grown almost anywhere as a bush or tree. Eventually, they are 20 feet tall and up to 15 feet wide, but they can be clipped and shaped in late spring, and will stand unusually well against a dark background of evergreens or shaded walls. For value, this is the best on the market.

It is also the oldest variety of which we have records. It turn sup in the East two years before the fall of Ancient Rome, and in one Japanese temple-garden it is said that there is a specimen nearly 100 ft high, which the Japanese tree-experts reckon to be over 1,800 years old, making it a contemporary of Marcus Aurelius.

We have known it in Europe for only 90 years, so our grandchildren may be in for a surprise. However, we tend to graft it on to our own wild white cherry, which may cramp its height. There is no particular need to do this ,as subhirtella roots freely from cuttings and would grow to its full stature if you pinched a sucker from a friend. I have bought myself two trees of the so-called rosebud cherry, subhirtella rosea, which strikes me as the simplest and freshest pink cherry of all.

Among the whites, we have our own wild cherry, which is just as venerable as anything kept alive in a Kyoto monastery. The wild gean, or *Prunus avium*, has been found in pre-Ice Age fossilised remains. Nobody believes that this tree could have survived that era, so when we see very old specimen trees and early records of even older ones, it may be right to derive them from the Roman imports, brought back into this country when our weather had warmed up again.

In the 1980s, this tree should have a bright future. This year, there is impressive evidence that self-help plantings of trees are springing up all over former sites of the elm in our country villages. They tend to avoid the more formal sorts of tree with heavy blossom, but appear to be overlooking our own native cherry as a suitably British tree for any local limestone landscape.

A double large-flowered form has been selected from it, and grows eventually into a very wide tree, which extends over 20 ft in its maturity. It is a noble plant, well able to hold its own in a British avenue or park, where it will reach 40 ft or so, and stand out for the silvering on its mature trunk.

The leaves are rather large, and might lead you to suspect out of season that they belong to another fat and inappropriate Japanese pink form. Their colour, however, is a good fresh green.

The next weeks will see it at its best, if you want to test my judgment: it is a late-flowering cherry, better seen in May than April. If you are still set on a harsh pink kanzan of your own, at least avoid the common beginner's error of alternating it with this white form because the local garden centre can sell you them both immediately. The double gean is a huge tree, even bigger than kanzan, and would collide ruinously with it, unless it was spaced very far apart.

It is odd to think that a century ago only this big white cherry would have alerted Victorian gardeners in Britain to the family's merits. Even then, the double form was not known. Wordsworth never saw our best modern blossom. From the 1890s only dates the arrival of the large-flowered forms from Japan, which have marked one of the most dramatic changes in our recent gardens' landscape.

In years when Japanese courtiers were growing 120 sorts of cherry in one garden for their own blossom-viewing soirées, British gardeners had two or three, no more, and were simply drinking sack in the ale house.

Perhaps that says something about the different focus of our poems on spring, their concern for the fresh green leaves on trees and hedges and their eye for the smaller madow flowers. The suburb and the cherry arrived together to make late April a different experience for European townsmen. If you use your judgment, there is still much pleasure to be had from this blossom's finer forms.

Backers hunt Guineas value

RACING

BY DOMINIC WIGAN

WITH NUREYEV down to either 5-4 or evens in the ante-post books on the 2,000 Guineas, there are now clear signs that backers are looking for outsiders whose odds a place appeal more than the cramped price about the favourite.

Three colts whose odds have contracted sharply since Saturday as a result of ante-post backers going for the top "place value" still available are Saint Jonathan, Posse and World Leader.

Rumours of Sain Jonathan's prowess over other middle-distance three-year-olds trained by Barry Hills, were rife from the start of the campaign and Hills revealed some time ago that he has backed his colt at 25-1 for the 2,000 Guineas.

In winning two races this season, the unbeaten Welsh Saint, colt has earned some startling compliments: "The most impressive winner of the Thirsk Classic Triel since Nearula," said a Northern trainer on Saturday.

While Saint Jonathan's odds have tumbled to a top offer of 8-1, the market move for Posse has been equally dramatic with that for World Leader only marginally less so.

John Dunlop, who ran Posse in the Greenham to see whether a tilt at the 2,000 Guineas was a credible proposition, must have been delighted with the Forli chestnut's showing at Newbury. Pat Eddery's mount was doing by far his best work close home and at the line was less than three-quarters of a length adrift off the far more experienced Final Straw.

Four days before, World Leader had pleased many including his trainer, Luca Cumani, with a bold effort in Newmarket's Craven Stakes. Despite little room to manoeuvre coming out of the dip, World Leader weaved his way into third place behind Tyrnavos and Star Way. Cumani believes World Leader has as good a chance as any of chasing Nureyev home.

Latest 2,000 Guineas betting —54 Nureyev, 8-1 Saint Jonathan, 10-1 Monteverdi, 12-1 Final Straw, 16-1 Tyrnavos, Posse and 20-1 World Leader.

EPSOM

2.00—Brewer's Green*
2.30—Son Fils
3.05—Borderline**
3.35—Effect
4.10—Barnet Heir***
4.45—Habadale

TV/Radio

BBC 1

† Indicates programme in black and white.

6.40-7.55 am Open University (ultra high frequency only). 9.35 For Schools, Colleges. 11.25 You and Me. 12.05 pm For Schools, Colleges. 12.45 News. 1.00 Pebble Mill at One. 1.45 Heads and Tails. 2.01 For Scools, Colleges. 3.53 Regional News for England (except London). 3.55 Play School. 4.20 The Space Sentinels. 4.40 Wildtrack. 5.05 John Craven's Newsround. 5.15 Potter's Picture Palace.

5.40 News.
5.55 Nationwide (London and South East only).
6.20 Nationwide.
6.55 The Wednesday Film: "Please Cove," starring Tom Jones.
8.30 Lena, starring Len Zavaroni.
9.00 News.
9.25 "King Henry V," by William Shakespeare, starring David Gwillim and Alec McCowen, Part 1.
10.28 News Headlines.
10.30 "King Henry V," Part 2.
12.10 am Weather / Regional News.

All Regions as BBC-1 except as follows:—

Cymru/Wales — 5.55-6.20 pm Wales Today. 6.55 Heddiw. 7.15 Ask The Family. 7.40-8.30 The High Chaparral. 12.10 am News and Weather for Wales.

Scotland—12.40-12.43 pm The Scottish News. 5.55 Reporting Scotland. 6.20 A Party Political Broadcast by the Scottish National Party. 6.30 Join BBC-1 (Nationwide). 12.10 am News and Weather for Scotland.

Northern Ireland—3.53-3.55 pm Northern Ireland News. 5.55-6.20 Schene Around Six. 8.30-9.00 Spotlight on Northern Ireland Affairs. 12.10 am News and Weather for Northern Ireland.

England—5.55-6.20 pm Look East (Norwich); Look North (Leeds, Newcastle); Look North-west (Manchester); Midlands Today (Birmingham): Points West (Bristol); South Today (Southampton); Spotlight South West (Plymuoth).

BBC 2

6.40-7.55 am Open University.
10.20 Gharbar.
11.00 Play School (as BBC-1 3.55 pm).
3.10 pm Snooker: Embassy World Professional Snooker Championship.
4.50 Open Unievrsity.
6.55 Snooker.
7.30 Mid-Evening News.
7.40 Chronicle.
8.30 Midweek Movie: "Pandora and the Flying Dutchman," starring James Mason and Ava Garlner.
10.30 Snooker.
10.45 Newsnight: Iranian Herion in Britain.
11.30 Snooker.
12.15 am Close.

BBC-2 Scotland only—6.55 pm A Party Political Broadcast by the Scottish National Party. 7.05 pm Join BBC-2 (Snooker).

LONDON

9.30 am Schools Programmes. 11.55 Barney Google and Snuffy Smith. 12.00 Cloppa Castle. 12.10 pm Rainbow. 12.30 Camera. 1.00 News, plus FT Index. 1.20 Thames News. 1.30 Take The High Road. 2.00 After Noon Plus. 2.25 Racing from Epsom. 3.45 Square One. 4.15 Michael Bentine's Potty Time. 4.45 Noah's Castle. 5.15 Struck by Lightning.

5.45 News.
6.00 Thames News.
6.25 Help!
6.35 Crossroads.
7.00 This Is Your Life.
7.30 Coronation Street.
8.00 China: Acrobats.
9.00 Whicker's World.
10.00 News.
10.30 Midweek Sports Special.
12.00 Barney Miller.
12.25 am Close: Personal choice winth Dorothy Tutin.

All ABA Regions as London except at the following times:—
Ytyt MvV

ANGLIA

1.25 pm Anglia News. 2.00 Houseparty. 5.15 Barney Miller. 6.00 About Anglia. 12.00 Police Surgeon. 12.30 am The Big Question.

ATV

1.20 pm ATV Newsdesk. 5.15 Solwyn. 6.00 ATV Today. 12.00 ATV Newsdesk. 12.05 am Wheels.

BORDER

1.20 pm Border News. 2.00 Housearound Wednesday. 6.25 PPB by the party. 5.15 Happy Days. 6.00 Look-SNP. 12.00 Police Surgeon. 12.30 am Border News Summary.

CHANNEL

1.20 pm Channel Lunchtime News. What's On Where and Weather. 5.12 Puffin's Birthday Greetings. 5.15 Makin' It 6.00 Report At Six. 10.28 Chanel Late News. 12.00 The Entertainers (Annie Ross). 12.25 am News and Weather in French followed by Epilogue.

GRAMPIAN

9.25 am First Thing. 1.20 pm North News. 5.15 Happy Days. 5.40 Police News. 6.00 North Tonight and Area Weather Forecast. 6.20 Party Political Broadcast by the Scottish National Party. 10.30 Reflections. 10.35 Scotsport Special. 12.30 am North Headlines.

GRANADA

11.50 am Cartoon. 2.00 pm Live From Two. 5.15 Mork and Mindy. 6.00 Granada Reports. 6.30 This Is Your Right. 12.00 The Odd Couple.

HTV

1.20 pm Report West Headlines. 5.15 Dick Tracy. 5.20 Crossroads. 6.00 Report West. 6.30 Youth Makes Music.

HTV Cymru/Wales—As HTV West/General Service except: 10.33 am abc. 11.55-12.10 pm Ffalabalam. 1.20 Penawdau Newyddion Y Dydd. 1.25-1.30 Report Wales Headlines. 4.45-5.15 Ni A Nhw. 6.00 Y Dydd. 6.15 Report Wales. 6.30-7.00 Jukes of Piccadilly.

SCOTTISH

1.20 pm News Headlines and Road and Weather Report. 1.30 Take My Wife. 5.20 Crossroads. 6.00 Scotland Today. 6.20 SNP Broadcast. 6.30 Emmerdale Farm. 12.00 Late Call. 12.05 am Police Surgeon.

SOUTHERN

1.20 pm Southern News and Weather. 2.00 Houseparty. 5.15 Mr. Magoo Cartoon. 5.20 Crossroads. 6.00 Day By Day. 6.35 Scene Midweek (South-East area only). 12.00 Southern News Extra. 12.05 am Wheels.

TYNE TEES

9.20 am The Good Word followed by North-East News Headlines. 1.20 pm North-East News and Where The Jobs Are. 5.15 Bailey's Bird. 6.00 North-East News. 6.02 Crossroads. 6.25 Northern Life. 12.00 North-East News. 12.02 am Vera, The Beautiful Spy. 12.32 Epilogue.

ULSTER

1.20 pm Lunchtime. 4.13 Ulster News Headlines. 5.15 Cartoon Time. 5.20 Crossroads. 6.00 Good Evening Ulster. 10.29 Ulster Weather. 12.00 Bedtime.

WESTWARD

1.20 pm Westward News Headlines. 5.12 Gus Honeybun's Birthdays. 5.15 Makin' It. 6.00 Westward Diary. 10.28 Westward Late News. 12.00 The Entertainers: Annie Ross. 12.25 am Faith For Life. 12.30 West Country Weather and Shipping Forecast.

YORKSHIRE

11.55 am Cartoon Time. 1.20 pm Calendar News. 5.15 Survival. 6.00 Calendar (Emley Moor and Belmont oditions).

Radio Wavelengths

1	1053kHz/285m 1089kHz/275m	3	1215kHz/247m & 90-92.5vhf stereo	BBC Radio London: 1458kHz, 206m & 94.9vhf
2	693kHz/433m 909kHz/330m & 88-91vhf stereo	4	200kHz/1500m & 92-95vhf	Capital Radio: 1548kHz 194m & 95.8vhf
				London Broadcasting: 1151kHz, 261m & 97.3vhf

RADIO 1

(S) Stereophonic broadcast.
‡ Medium Wave.

5.00 am As Radio 2. 7.00 Steve Wright. 9.00 Simon Bates. 11.31 Paul Burnett. 2.00 pm Andy Peebles. 4.31 Kid Jensen. 7.00 Radio 1 Mailbag. 8.00 Jaye Cooper. 9.50 Newsbeat. 10.00 John Peel (S). 12.00-5.00 am As Radio 2.

VHF Radio s1 and 2—5.00 am With Radio 2. 8.02 pm Listen To The Band (S). 8.45 Alan Dell with the Dance Band Days. 9.15 Among Your Souvenirs (S). 9.55 With Radio 2. 10.00 With Radio 1. 12.00-5.00 am With Radio 2.

RADIO 2

5.00 am News Summary. 5.03 Ray Moore (S). 7.32 Terry Wogan (S) including 8.27 Racing Bulletin and 8.45 Pause for Thought. 10.03 Jimmy Young (S). 12.03 pm David Hamilton (S). 2.03 Ed Stewart's Request Show (S) including Racing from Epsom. 4.03 Much More Music (S). 5.00 News. 5.05 Waggoners' Walk. 5.20 Much More Music (S). 6.03 John Dunn (S). 8.02 European Soccer Special. 9.30 Among Your Souvenirs (S) (joins VHF). 9.55 Sports Desk. 10.02 Punch Line. 10.30 Hubert Gregg says Thanks for the Memory. 11.02 Brian Matthew with Round Midnight, including 12.00 News. 2.02-5.00 am You And The Night And The Music (S).

RADIO 3

‡6.55 am Weather. 7.00 News. 7.05 Your Midweek Choice, part 1 (S). 8.00 News. 8.05 Your Midweek Choice, part 2 (S). 9.00 News. 9.05 This Week's Composer: Bax (S). 10.00 Oboe and Piano Music (S). 10.45 Music For Organ (S). 11.20 20th-Century Songs (S). 11.55 Northern Sinfonia Orchestra (S). 1.00 pm News. 1.05 Concert Hall (S). 2.05 Music Weekly (S). 2.55 BBC Concert Orchestra (S). 3.55 Music For Clarinet and Piano (S). 4.55 News. 5.00 Mainly For Pleasure (S) (‡ and mono only from 6.20). 7.00 Music Now. 7.45 Virgil's Eclogues. 8.00 Rozhdestvensky and the BBC SO Concert, part 1: Mozart, Schnittke (S). 8.40 Six Continents. 9.00 Rozhdestvensky and the BBC SO, part 2: Bruckner (S). 9.50 Interpretations on Records: Schubert's String Quintet in C (S). 10.45 Michel Beroff piano recital (S). 11.45 The Scholars sing Samuel Webbe (S). 11.55-12.00 News.

VHF only—6.00-7.00 am and 6.20-7.00 pm Open University.

RADIO 4

6.00 am News Briefing. 6.10 Farming Today. 6.25 Shipping forecast. 6.30 Today, including 6.45 Prayer for the Day, 7.00, 8.00 Today's News, 7.30, 8.30 News Headlines and 7.45 Thought for the Day. 8.35 Yesterday in Parliament. 9.00 News. 9.05 Midweek With Sylvia Syms. 10.00 News. 10.05 Gardeners' Question Time. 10.30 Daily Service. 10.45 Story Time. 11.00 News. 11.05 Baker's Dozen. 12.00 News. 12.02 pm You And Yours. 12.27 Just A Minute (S). 12.55 Weather; programme news. 1.00 The World At One. 1.40 The Archers. 1.55 Shipping forecast. 2.00 News. 2.02 Woman's Hour. 3.00 News. 3.02 Listen With Mother. 3.15 Afternoon Theatre (S). 4.00 Choral Evensong (S). 4.45 Short Story. 5.00 PM News Magazine. 5.50 Shipping forecast. 5.55 Weather; programme news. 6.00 News. 6.30 My Music (S). 7.00 News. 7.05 The Archers. 7.20 Fat Man on a Bicycle (S). 7.45 For England and St. George. 8.30 Migrations. 8.45 File on 4. 9.30 Kaleidoscope. 9.59 Weather. 10.00 The World Tonight. 10.30 Wrinkles (S). 11.00 A Book At Bedtime. 11.15 The Financial World Tonight. 11.30 Today In Parliament. 12.00 News.

BBC Radio London

5.00 am As Radio 2. 6.30 Rush Hour. 10.03 The Robbie Vincent Telephone Programme. 1.03 pm London Live. 3.03 John Toogood's Showcase. 4.30 London News Desk. 5.35 Look, Stop, Listen. 7.03 Black Londoners. 8.00 Gunners In Europe: Juventus v. Arsenal. 9.15 Question Time from the House of Commons. 10.15-5.00 am Join Radio 2.

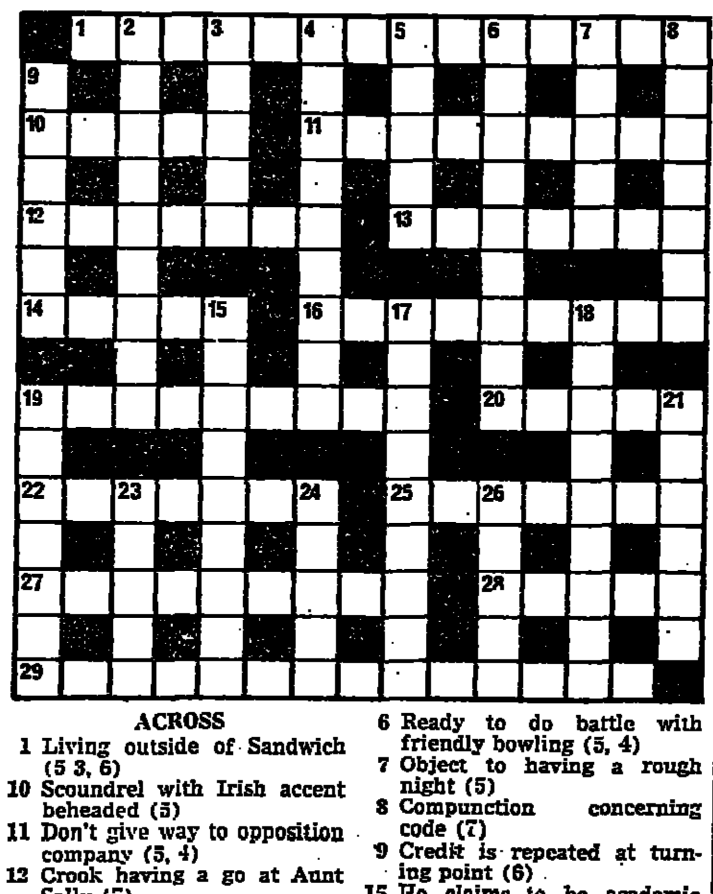
London Broadcasting

6.00 am AM with Bob Holness and Douglas Cameron. 10.00 Brian Hayes. 12.00 LBC Reports. 8.00 pm Jazz After Eight. 9.00 Nightline with James Cameron talking about his memoirs "Point of Departure." 12.00 LBC Reports Midnight. 1.00 am Night Extra. 5.00 Morning Music.

Capital Radio

6.00 Graham Dene's Breakfast Show (S). 9.00 Michael Aspel (S). 12.00 Dave Cash (S). 1.00 pm London Today First Report (S). 1.10 Dave Cash continued. 3.00 Roger Scott (S). 7.00 London Today (S). 7.30 Adrian Love's Open Line (S). 9.00 Nicky Horne's "Your Mother Wouldn't Like It" (S). 1.00 Tony Myatt's Late Show (S). 2.00 am Duncan Johnson's Night Flight (S).

F.T. CROSSWORD PUZZLE No. 4,257



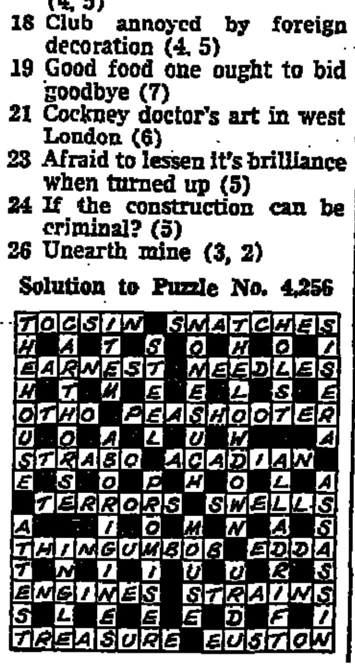
ACROSS

1 Living outside of Sandwich (5 3, 6)
10 Scoundrel with Irish accent beheaded (5)
11 Don't give way to opposition company (5, 4)
12 Crook having a go at Aunt Sally (7)
13 Blacksmith gets round a scrounger (7)
14 Girl extended play of obedient follower (5)
16 Senior gains victory over eastern drink (5, 4)
19 Behaved when Charles initially promoted out of turn (9)
20 Quiet individual did very well (5)
22 Beg English leader to natter all over the place (7)
25 Right to notice one state becoming reformist (7)
27 Pardon soldiers given assigned task (9)
28 Robe outside right developed (5)
29 Sack attacking command (5, 2, 3, 4)

DOWN

2 15 going to public school on side (5 4)
3 Turn aside to declare tin-opener (5)
4 Sailor's alternative inclination capable of taking in (9)
5 One who was grumpy to Snow-White (5)
6 Ready to do battle with friendly bowling (5, 4)
7 Object to having a rough night (5)
8 Compunction concerning code (7)
9 Credit is repeated at turning point (6)
15 He claims to be academic chairman (9)
17 Fop managed church as a stock farm holiday centre (4, 5)
18 Club annoyed by foreign decoration (4, 5)
19 Good food one ought to bid goodbye (7)
21 Cockney doctor's art in west London (6)
23 Afraid to lessen it's brilliance when turned up (5)
24 If the construction can be criminal? (5)
26 Unearth mine (3, 2)

Solution to Puzzle No. 4,256



ENTERTAINMENT GUIDE

OPERA & BALLET

COLISEUM. Credit cards 240 5258. Reservations 836 3161. ENGLISH NATIONAL OPERA. Tonight & Sat 7.00: ...

THEATRES

PHOENIX THEATRE. CC. S. 01-836 2294. Evs. 8.0. Sat. 5.0 & 8.0. Mats. Wed. 3.0. The New Romantic Stage Musical THE UMBRELLAS OF CHERBOURG. ...

SHAW THEATRE. 01-388 1394. National Youth Theatre in a new play THE VOLUNTEER by Michael Ardittl. Evgs. 7.30.

STRAND. 01-836 2660. Evenings 8.00. Mats. Thurs. 3.00. Sat. 5.30 and 8.30. LONGEST RUNNING COMEDY IN THE WORLD. NO SEX PLEASE—WE'RE BRITISH. Directed by Allan Davis. Credit cards 01-837 4143. Group sales Box Office 01-379 6061.

STRATFORD-UPON-AVON. Royal Shakespeare Theatre (0789) 292271. Tickets immediately available for RSC in ROMEO AND JULIET tonight (6.30) tomor (mat). Apr 28. AS YOU LIKE IT Apr 25. 26 (mat), May 5. Recorded booking info (0789) 69191.

TALK OF THE TOWN. 01-734 5051. AIR CONDITIONING. CREDIT CARDS. LONDON'S GREATEST NIGHT OUT. From 8 o'clock. Dining and Dancing. 9.30 SUPER REVUE BUBBLY and in cabaret at 11: IRIS WILLIAMS.

VAUDEVILLE. S. CC. 01-836 9988. Grp sales 379 6061. Evgs. 8. Sat. 5.30 and 8.30. Wed. Mat 2.45 IAN OGILVY SHEILA GISH. JAMES COUSINS in STAGE STRUCK. A new thriller by Simon Gray.

VICTORIA PALACE. CC. 01-828 4735-6. 01-834 1317. Evgs. 7.30. Mats. Wed. and Sats. 2.45. ANNIE. Group Sales Box Office 01-379 6061.

WAREHOUSE. Donmar Theatre, Covent Garden Box Office 836 6808. ROYAL SHAKESPEARE COMPANY. Eves. 7.30 Chekhov's THREE SISTERS. trans. Richard Cottrell (sold out).

WHITEHALL THEATRE. 930 7765. Reduced price previews May 8 9. Special Preview May 10. OPENS May 12. Paul Raymond presents FIONA RICHMOND and a Bedfull of Beauties in WOT! NO PYJAMAS! Featuring Men Only Magazine's Sensational Playmates of the Year. Advance Box Office Open.

WINDMILL. CC. 01-437 6312. Twice nightly at 8.00 and 10.00. Suns. 6.00 and 8.00. Paul Raymond presents RIP OFF. Hotter than ever for 1980. The erotic experience of the modern era. Fifth great year.

WYNDHAM'S. S. 01-836 3028. CC bkgs. 379 6565. Tickets only £1.80-£4.80. Evgs. 8.00. Fri. and Sat. 6.00 and 8.40. Belt and Braces in ACCIDENTAL DEATH OF AN ANARCHIST.

CINEMAS

ABC 1 & 2 SHAFTESBURY AVE. 836 8861. Sep. Perfs. ALL SEATS BKBLE. ...

ART GALLERIES

CAMPBELL & FRANKS. 37, New Cavendish St., W1. RUSSELL FLINT. 10-30-5.30, Sats. 10.30-1.30.

COLNAGHI. 14, Old Bond St., London, W1. 01-491 7408. IMPERIAL OTTOMAN TEXTILES. Until 23 May. Mon.-Fri. 9.30-6. Sats. 10-1.

FINE ART SOCIETY. 148, New Bond St., W1. 01-629 5116. EILEEN HOGAN.

GUILDHALL ART GALLERY, EC2. Society of Portrait Sculptors & Original Prints. An Exhbn. Mon.-Sat. 10-5. Until 1 pm May 2nd. Adm. Free.

JPL FINE ARTS. 24, Davies St., London, W1. 01-493 2630. EDOUARD VUILLARD 1864-1940. Drawings, Watercolours and Pastels. March 19-May 2. Mon.-Fri. 10-6.

LEFEVRE GALLERY. 30, Bruton St., W1. 01-493 1572-73. An Exhibition of EDWARD BURRA. Paintings from America. Mon.-Fri. 10-5. Sat. 10-1.

MARLBOROUGH. 6, Albemarle St., W1. EDWARD SEAGO. 1910-1947. Paintings & Watercolours. Until 23rd April. Mon.-Fri. 10-5.30. Sat. 10-12.30.

MATHAF GALLERY. 24, Motcombe St., SW1. Tel: 235 0010. Specialists in 19th Century and Contemporary Paintings of ARABIA.

ROYAL INSTITUTE OF PAINTINGS IN WATERCOLOURS. Annual Exhibition. The Mall Galleries, The Mall, SW1. Daily (inc. Sun.) 10-5. Until April 27. Adm. 20p.

CLUBS

EVE has outlived the others because of a policy of fair play and value for money. Supper from 10-3.30 am. Disco and top musicians, glamorous hostesses, exciting floor shows. 189, Regent St. 734 0557.

GARGOYLE. 69, Dean Street, London, W1. NEW STRIPTEASE FLOORSHOW "CLOSE ENCOUNTERS" 11-2.30 am. Shows at Midnight and 1 am. Mon.-Fri. Closed Saturdays. 01-437 6455.

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Information on regulations, tariffs and documentation procedures.

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Technical Page

EDITED BY ARTHUR BENNETT AND TED SCHOETERS

● COMPUTERS

Two new machines

ANNOUNCEMENTS of computer systems have been made by both Sperry Univac and Harris Systems.

Called System 80, the Sperry machine is described as combining capacity and facilities "generally associated with larger mainframes" with low system cost and ease of use.

A minimum system is composed of central processor with 262k bytes of main storage, and microprocessor-based control units connected to a 110 megabyte integrated disc storage subsystem, console workstation, diskette and printer.

But this is field upgradable to support a maximum of one megabyte of main storage, 40 workstations, eight tape units, multiple printers and card processors, eight communications lines and some eight times as much disc storage.

Software is based on the company's OS/3 operating system now in use by several thousand customers on such machines as the 90/30. It has been expanded, says the company, to include the information processing requirements of the 80s.

System 80 has been designed for operation either in a computer room or a controlled office environment. But due to the use of emitter-coupled logic large scale integrated technology, floor space requirements of the system have been greatly reduced. Prices start at about £31,000 rising to about £52,000, with five year agreement monthly rentals extending from £658 to £1,080.

Announced on the same day was the Harris Systems' 9200 family, a new range of microprocessor-based information processing systems.

First two models available from September onwards, are the 9210 supporting up to 32 devices per system with IBM 3270 family compaibility, and the 9220 offering additional ability to communicate concurrently with multiple hosts in BSC and/or SNA/SDLC protocols.

Architecture of the machines will provide advanced networking abilities and allow for the modular addition of new functions as required by network growth.

Sperry Univac is at 65 Holborn Viaduct, London EC1P 1AB (01-236 1010) and Harris Systems is located at 145 Farnham Road, Slough, Berks SL1 4XD (0753 34666).

● METALWORKING

Numerical control systems

BAD NEWS always makes the best headlines, which is why a threatened walk-out and the presence of hecklers created another newsworthy day for the Prime Minister when she visited one of two Hampshire factories last Friday.

A few hundred yards away, good news was endorsed with the raising of champagne glasses of the entire workforce of another company when Mrs. Thatcher opened a new factory extension for the only British manufacturer of numerical control systems for the machine tool industry, Posidata, Rankine Road, Basingstoke (056 52741).

Two entrepreneurs — Jeremy Fermo and Bernard Gingell — founded the company in 1972, which has now become a £3½m concern. It has been entirely self-financing and has developed its own technology as well as creating engineering teams in hardware and software.

America and Japan may dominate the UK market (Fanuc of Japan claims 60 per cent of world sales) but the British runner is able to secure a growing share of the home market by establishing a major British presence at home in the face of aggressive overseas competition.

When Posidata started in business eight years ago, relatively few machine tool makers offered numerically controlled versions of their milling machines, lathes, etc., but the reverse is true today. Also at that time, Plessey was the major British supplier—now this company uses systems from Posidata.

Despite the growing demand for these systems, there has been poor response from British suppliers, leaving the field wide open to American and Japanese domination.

Despite the intensity of foreign, overseas competition, however, the British company is producing 30 systems a month —hence its recent investment of over £1m in new factory facilities and equipment.

This outlay should result in trebled production potential so that machine tool makers here now have the choice of home-grown systems instead of accepting products from overseas suppliers.

Detailed engineering is vital to the integration of numerical control to a machine tool and its electronic to mechanical interfacing. Thus, investment has also strengthened a large service department whose engineers carry a wide range of technical test equipment and spares—worth around £4,000 to each service engineer.

The company's larger customers have a resident Posidata engineer who provides help in the first integration of the control system to the machine tool, and every installation at the premises of an end-user will be supervised by a Posidata commissioning engineer.

Response time to a user's problem is rapid and effective—a 24-hour SOS is very rarely exceeded—and same-day service is said to be typical.

Although nationally known companies and government establishments are established repeat-order customers, by far the largest percentage of installations is with small machining/engineering companies and sub-contract machine shops employing 20 to 30 people, and often less. Level of investment for the smaller fry is relatively very high, and repeat orders from these are frequent.

The company is now part of the Dana Corporation of America.

DEBORAH PICKERING

● MATERIALS

Makes good labels

AN IMPROVEMENT over the direct marking of product containers by screen or hot stamp methods is offered by 3M with its Clearmark transparent roll label stock.

The stock is manufactured from non-fading polyester film topcoated to provide good anchorage for inks (including those based on alcohol) and backcoated with permanent acrylic adhesive and removable liner.

Exceptional transparency is claimed by 3M, so that lables made from the stock give the impression of direct printing on to the bottle or other surface. The material also die-cuts very cleanly and the acrylic adhesive is particularly suitable for use on glass, coated metals, treated polythelene and polypropylene.

More from Industrial Specialities, 3M United Kingdom, P.O. Box 1, Bracknell, Berkshire RG12 1JU (0344 58274).

● COMMUNICATIONS

Improving the service

MAINLY KNOWN for its semiconductor and circuit high speed testing equipment, Teradyne is now poised to attack the European PTT market for advanced telephone line testing equipment.

It will base its sales campaign on the results of experience gained in the U.S. where it has been offering the equipment for some time: a 15 to 20 per cent saving in fault clearing time on subscribers' lines and a 20 to 25 per cent reduction in the number of customer trouble reports.

A basic aim of the equipment is to get to the impending faults before it becomes evident to the subscriber.

Teradyn'es system is called 4-Tel and is based on the use of a service area computer (SAC) which can communicate over trunk lines to a number of exchanges at which line testers are installed. Communication between the two types of unit is digital so that the test results obtained on lines radiating from each exchange to subscribers are not affected by the distance between computer and tester.

Testing can be conducted manually at purpose designed terminals with simplified keyboards, some 10 of which might be connected to the SAC in a typical arrangement at a repair service centre or testing can be automatic.

The exchange-based testers are able to carry out a variety of tests looking into each subscriber's line, and do so at very high speed—about 600 measurements a minute involving impedance, resistance capacitance, current and so on.

Thus, overnight, 4-Tel can be left to dial every number in the group of exchanges that it serves, running a series of diagnostic tests on each line as it comes up. A printout is provided each morning showing the faults, allowing service management to act immediately and dispatch the right kind of team to the right place. The equipment also stores the history of each line, so that if a subscriber has been having persistent trouble the extent of it will be shown.

Likely cost to a PTT is in the region of £6 per line, and Teradyne admits that it has a hard task ahead of it in selling such equipment in Europe.

On the other hand it believes its equipment is a long way ahead of anything so far offered by any of the established suppliers to PTTs in Europe. The company says that it will, if necessary, manufacture the equipment in the UK.

Teradyne is at Queens Road, Weybridge, Surrey KT12 9XB (Weybridge 51431).

GEOFFREY CHARLISH

Data transmission

FOUR MORE introductions of modems (modulator/demodulator units) for data transmission over phone lines have been launched by ITT Business Systems.

One of them, the 1161, is a 300 bits/sec CCITT device for use on Post Office leased lines and offers full duplex on a pair line, with dial up facilities on non-Post Office exchanges and lines.

Models 2084 and 2082 are for use on leased two or four wire lines and public switched network operations meeting various CCITT requirements between 600 and 2400 bps.

The fourth unit, DCB 19200 UK is a synchronous and asynchronus baseband modem that operates at 600, 1200, 2400, 4800 and 9600 bps and may be used on Post Office EPS8 lines. Able to operate at unusually long distances, this modem can produce large savings in the use of high cost, high speed voice band modems and provides users with complete flexibility.

ITT reports that its total sales of modems world-wide has now passed the £6m mark.

More from Lion Buildings, Crowhurst Road, Hollingbury, Brighton, BN1 8AN (0273 507111).

● SECURITY

Screens the surroundings

NEWLY DEVELOPED by Chubb Alarms is the 8400 microprocessor-based alarm monitoring and control system which provides in one desk-top unit a screen display, printer and keyboard.

Based on an LSI 11 micro, the equipment uses a high security multiplexing system to allow monitoring and control for up to 500 devices wired to provide intruder detection, fire detection or the monitoring of building plant.

Alarms are reported simply and effectively on the screen and a useful additional facility is the watchman's patrol check. Up to 100 patrol stations can be programmed in any number of different routes and timings and as the watchman checks in at each it will be shown on the screen.

A different pattern of alarm monitoring can be provided at night automatically and in addition, alarms can be made to summon police or fire brigade assistance. Sensors can be deactivated from the keyboard which can also be used to transmit command signals.

Use of one or two six digit alpha numeric passcodes enables a supervisor to obtain information from the system, or tailor the time schedules, circuit deactivations, guard tours and displays to the needs of each protected site or building.

Chubb Alarms is at 42 Hersham Road, Walton-on-Thames, Surrey KT12 1RY (Walton 43851).

Intruders are seen

A NUMBER of different detection zones are created in a passive infra-red detection system from Carters, by the use use of a multi-segment lens arrangement.

Two lens assemblies have been introduced, easily interchangeable from the front of the receiver unit. A 12 zone lens gives protection over an area of 30 x 30 feet with six short range and six long range zones. A 150 feet long-range pattern has long, intermediate and short-range zones making it particularly suited to protecting corridors, aisles and passageways.

When an intruder enters and leaves any of the protected zones his natural infra-red (heat) emission will activate the detector.

The system is made easier to instal by means of a zone location facility. Removal of the unit's cover automatically switches on a lamp which can be seen glowing red only when the installer is standing in one of the protected zones. Thus, he can walk about, looking at the lamp, and precisely delineate each zone.

Carters is at Sycamore Avenue, Burnley, Lancs BB12 6QR (0282 27911).

● VENTILATION

Swede's UK market bid

LONG INURED to a cold climate, we are nevertheless just now busily insulating and double-glazing at home and good—or even adequate—ventilation and air conditioning is considered almost a luxury in these islands.

Intense activity in warming our immediate ambience is now highlighting another unforeseen hazard (particularly on the domestic front) in that over-insulated and excessively heated premises can lead to the problems of damp and rot.

Average concession to ventilation in homes, pubs, restaurants and offices, is the obligatory extractor fan cut into a window. Where this is lacking, opening a window is the instant answer. Out go bad smells, mugginess and, of course, dearly paid-for heat with the dissipation of valuable energy.

The Swedes have always had to be more energy conscious than we and because their winters have a head start on ours, they are more stringent in heat requirements in any environment. At the same time, proper ventilation and air conditioning has been a natural must with their forte of heat recovery.

All the known world is now energy conscious but AB Svenska Flaktfabriken concentrates intensely on recapturing heat, and for over 60 years has been involved in the fields or air and gas treatment environmental control, industrial drying, air conditioning, and what it calls "comfort" ventilation for factories, offices, stores, hospitals, homes and public buildings.

Its air handling products are designed to provide the right amount of air, at the right temperature and in the right places. Whether for the correct drying of industrial products, such as pulp, paper and grain, transporting waste and other materials cleanly and efficiently, or recapturing energy in the form of heat that would otherwise be lost, it seems to offer an endless range of systems.

Some of the latter have been in use in the UK for more than 30 years, yet over 50 UK engineers, architects and property developers (and an FT watchdog) were invited to see, in Sweden, a segment of the company's systems against a background of technical expertise.

Why should we buy and import supplies of air handling, ventilation, etc., equipment from so far across the sea? Quality, performance, durability, was the answer from the ICI man who had lived with Flakt products at ICI, Wilton, Cleveland, for over 25 years. First UK installation undertaken was in London at Millbank Tower in the early fifties —currently, its imprint is evident at NatWest Tower, the bank's Goodmans Fields complex, Home Office at Queen Anne's Mansions London, CEGB, Bristol, and Wiggins Teape, Basingstoke.

The relentless, high-powered three-open-days exercise in Stockholm, Norrkoping and Jonkoping did more than blind existing and potential customers with technological ingenuity—it spelled out a spearhead for the UK end of Flakt.

It is based here at Staines House, 158 High Street, Staines, Middx (Staines 57221) and although it has established its UK specifiers, it is desirous of taking a larger share of the general cake in air handling, ventilation, etc.

Concerned that its UK image is one on a par with that of Harrods to the high street supermarket, Flakt in Britain—apart from successfully wooing Saudi and Third World customers—is sending out its specialist salesmen into a wider field.

Although a technological trading house primarily for production and sales of equipment it also develops, designs, installs and services and, because it has the capacity to undertake contracts calling for the delivery of complete plants, it assumes the functions of a contractor as well as an equipment fabricator with technical process responsibility.

DEBORAH PICKERING

FINANCIAL TIMES SURVEY
Wednesday April 23 1980

هكذا من الأصل

World Paper and Pulp

Many of the world's paper and board producers are enjoying improved profits and some major investment projects are planned. In Western Europe, in particular, the overall market remains bouyant.

A new mood of optimism

By William Hall

THE WORLD pulp and paper industry has entered the 1980s in a very uncertain mood. Energy costs have been rising sharply and everyone is talking about the imminent recession—yet the demand remains surprisingly buoyant in most of the world's major markets.

In the opening monhs of this year, fairly substantial increases in the prices of market pulp, newsprint and kraft liner were made to stick, and further price increases are possible before the year end.

The major North American and Scandinavian mills are still running at near maximum capacity, stock levels are, in many cases, close to historically low levels and substantial new capacity is scheduled to come on stream in areas such as newsprint and lightweight coated paper production.

Is the world paper industry having a last fling before it lurches back into another major recession? Certainly, there are similarities between the current situation and that existing shortly after the sharp rise in oil prices in 1973/74.

However, there are grounds for believing that the world's major paper producers are better placed to weather the coming recession, than they were last time. The Scandinavians, in particular, are not going to make the same mistakes again.

Although only ten per cent or so of the world's total wood pulp comes onto the open market, the price of bleached sulphate pulp (the main type of market pulp) is watched extremely carefully by everyone involved in the paper industry.

For those countries without huge integrated pulp and paper mills, market pulp (and wastepaper, for that matter) is the *lifeblood of the paper industry*. After the last sharp rise in oil prices, when the world economy was falling into its deep recession, the Scandinavian producers tried to use their dominant market position to prop up the world price of market pulp.

For a while they seemed to be succeeding and the price averaged around $415 per tonne through 1975 and 1976. However, stocks were building up and by early 1977 there was around 3m tonnes overhanging the market.

Then came the price collapse. By early 1978, it was down to $310 per tonne, at which level the low cost U.S. producers were just about breaking even but the Canadians, and especially the Swede's, the two biggest market pulp producers, were losing money hand over fist.

The sharp drop in the pulp price led to severe financial hardship for many producers. However from the spring of 1978 onwards, market pulp prices started to recover. In 1979, they rose by an average 29 per cent and since the turn of the year they have increased still further. Meanwhile, Norscan stocks (North American and Scandinavia account for four-fifths of pulp exports) have dropped to about 0.7m tonnes where they represent just over a fortnight's production—half "normal" levels.

PAPER & BOARD PRODUCTION—1979

m. tonnes		Annual growth %
U.S.A.	64.7	5.0
Japan	17.9	8.3
Canada	13.5	1.6
Germany	7.4	8.0
Sweden	6.3	10.2
Finland	5.7	11.6
France	5.3	6.0
Italy	5.0*	11.5*
U.K.	4.2	1.1

Source: individual country data.
* Estimate.

Part of the improvement in pulp prices has been offset by the general weakness of the dollar for much of the year. Nevertheless, Finland was able to increase its market pulp exports by 21 per cent last year and in value terms they were over 50 per cent up.

For the first time for several years, the Swedish producers have started to make reasonable profits again. Liquidity has improved and debt has been reduced. In the U.S. the net income of the leading paper companies in 1979 rose by 34 *per cent according to Citibank*. This was well above the average for manufacturing industry in general.

Although not all the statistics have been published yet, it looks as if world paper and board production rose by around 5 per cent last year to between 175m tonnes and 180m tonnes. World wood pulp production, which is growing more slewly, was probably of the order of 130m-140m tonnes.

This year output will probably stagnate from mid-year onwards and could fall marginally *in some instances*. On balance, however, the world paper industry is expecting the recession to be a much milder version of the previous one, and from 1981 growth should be resumed—if one includes hte developing countries, this could *be at a rate of 3 per cent per* annum over the medium-term.

For the traditional paper producers of Scandinavia and Canada, the coming recession is a relatively minor problem in contrast to the fundamental shifts in the structure of the world paper industry which are threatening their long-term competitiveness.

The Scandinavian forest products industry, in particular, has a number of serious long-term worries. Its forests are just about fully exploited, wood costs are twice as expensive as those in places like the southern states of the U.S. and, finally, its energy costs are far higher than in North America.

On the technical side, this means that Scandinavian producers rely more heavily than most on mechanical pulping since this gives twice as much pulp per tree as is the case with chemical pulping. It also leads to far less pollution. However, it is more costly in terms of energy and tends to be only suitable for low quality paper production, for example, newsprint.

Thermo-mechanical pulping, which gives higher quality pulp, is becoming increasingly important, but energy costs are critical. For this reason the result of the recent referendum in Sweden on the future expansion of nuclear energy has been welcomed by the Swedish paper industry which accounts for 40 per cent of the country's entire industrial energy consumption.

If Swedish voters had voted against the nuclear expansion programe, it had been estimated that a fifth of the country's paper and pulp industry would have become unprofitable as a consequence of higher energy costs.

While the expansion of Sweden's nuclear energy programe will help the paper industry, it is not sufficient to halt the growing importance of Brazil and the southern states of the U.S. in pulp and paper production. These areas are becoming increasingly important producers of market pulp and other relatively low quality products, such as newsprint and kraft liner.

They are starting to make inroads into Scandinavia's traditional near captive market in Western Europe. Brazil, for instance, will have 1m tonnes of market pulp available for export this year, while some of the new mills in the deep south of the U.S. have been designed with the European market in mind. Aside from Kraft Line, the U.S. has never been very "export conscious" in the past, but attitudes are changign.

In a useful recent study on future developments in the pulp an dpaper industry*, English China Clays says that the real strength of the American South lies in its low operating costs, offering a virtually guaranteed profitability regardles of market strength.

Important areas

Against this background the Scandinavian producers are reducing their dependence on bulky low value products. Over the long-term, papre production, as opposed to simple pulp production, tends to be more profitable and the Scandinavians are concentrating increasingly on producing paper with a higher added value.

Scandinavian mills are becoming more and more integrated and the big producers are buying up paper mercahnts in their major markets to assure captive outlets. By 1984, all tariff barriers between EFTA and the EEC will have disappeared and this is encouraging vertical integration in the markets of the ultimate paper consumer.

MARKET PULP CAPACITY—1980

		Annual growth %
CANADA	7.5	+ 3.7
SWEDEN	4.9	+ 1.3
U.S.A.	4.3	+ 4.5
FINLAND	2.2	—
BRAZIL	1.6	+15.2
JAPAN	1.2	—
NORWAY	0.7	+ 7.7
FRANCE	0.6	+ 2.6
SPAIN	0.5	—
TOTAL	29.8	+ 4.2

Source: FAO.

Scandinavia still has one big advanatge—it is probably the most skilled producer of high-quality mechanical papers. This is a growth market and some 90 per cent of Scandinavia's additional 1m tonnes capacity between now and 1983-84 will be given over to mechanical grades.

However, other European producers are invsting substantial amounts in areas such as lightweight coated papers and there is a danger that in their eagerness to reduce their reliance on market pulp, the Scandinavians may be moving from one highly competitive area to another, only slightly less competitive area.

Scandinavia is not alone in having to restructure its paper industry to meet the competitive threat of the new producers. Eastern Canada also has problems resulting from its traditional heavy reliance on newsprint.

Quebec and Ontario, alone, account for around a quarter (6.6m tonnes) of the world's total newsprint capacity. Much of the machinery is composed of small, obsolete paper machines and virtually all the substantial new capacity currently being installed is either in the South or on the West Coast of the U.S. and British Columbia.

According to English China Clays, the average size of Ontario and Quebec's 100 plus *newsprint machines* is around 65,000 tonnes per year. By contrast, the average size of machines in the American Deep South is 125,830 tonnes per year and this gives considerable economies of scale. Pulp costs in Northern Ontario are a third higher than in the South.

At the moment, these deep-rooted problems in Eastern Canada's newsprint industry and disguised by the strength of demand in the U.S. market and the weakness of the Canadian dollar which has given the area a tremendous *competitive advantage*.

The newsprint industry appears to be moving into a period of serious overcapacity and this, combined with any strengthening of the Canadian dollar relative to the U.S. dollar, could lead to serious problems soon surfacing.

Canada is cultivating new newsprint outlets in Western Europe and these will become relatively more important, *probably*. In addition, it is diversifying into mechanical printing grades and lightweight coated papers. However, English China Clays points out that Canada lacks the technology for sophisticated super-calendered, uncoated mechanical grades and markets for these papers have yet to be extensively developed.

While the Scandinavian and Canadian producers have more than their fair share of difficulties, the rest of the world's paper industry still has to wrestle with the problem of pollution and the long-term threat from competitors such as plastic and electronic systems.

Plastic materials have made inroads into the paper packaging market, but penetration

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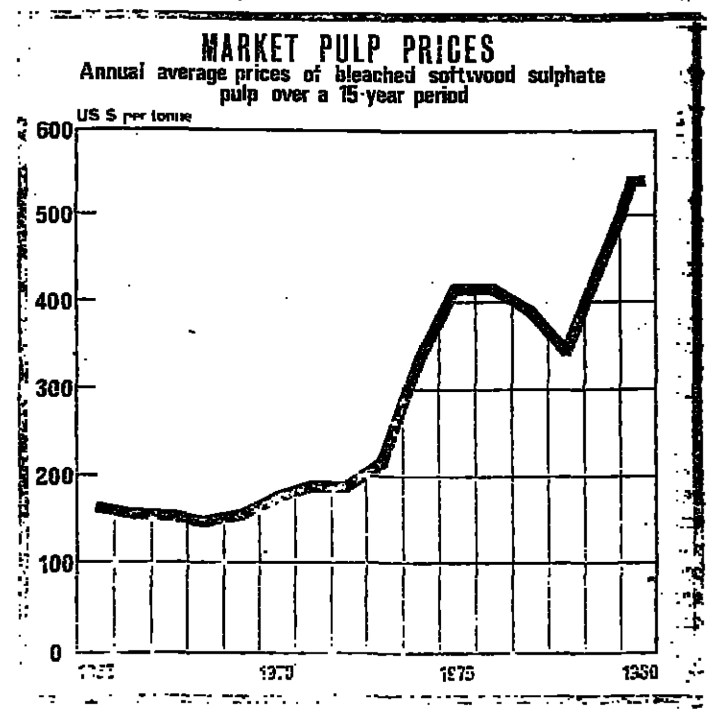

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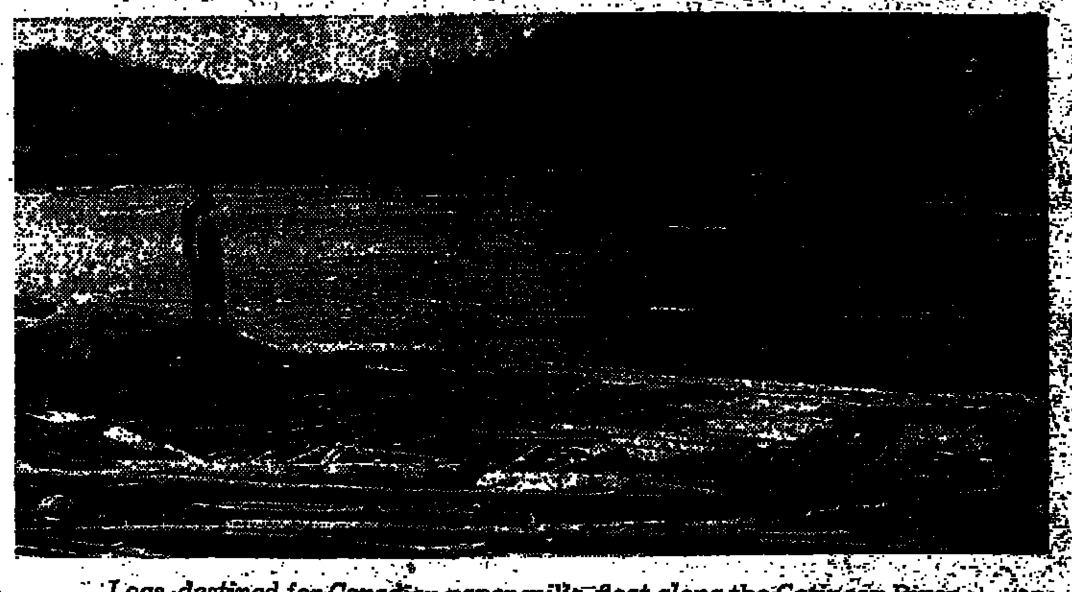
Surge in North American profits



Logs, destined for Canadian paper mills, float along the Gatineau River

AFTER THREE years of unexpected and unprecedented market growth the pulp and paper industry in Canada and the U.S. is investing billions of dollars again. There is more caution than in the buoyant 60s but the industry is in better shape to finance expansion than at any time in the last decade.

It hit severe turbulence in the 1970 tight money recession and again during the recession which followed the 1973-74 energy crisis. Most large and well diversified U.S. groups weathered those storms without structural damage, though a few emerged in emaciated form.

In Canada, where many companies were extremely sensitive to swings in U.S. demand for newsprint and lumber and were less diversified, casualties and takeovers were rife. But the renewed prosperity which came as the American economy recovered and went through one of its longest ever continuous growth periods has been extraordinary. It has been based on a renewed surge in newspaper advertising in the U.S., recovery of profits in the U.S. newspaper industry – itself, sustained demand for pulp which reversed an embarrassing over-supply situation into a growing shortage, and strong markets for linerboard, packaging materials and specialty papers.

There are several very large linerboard producers in the south-east U.S. which, during previous recessions, have been able to sell significant amounts in Europe. U.S. linerboard costs traditionally are lower than Canadian. Generally, though, American paper product exports tend to move in the Western hemisphere and in the Pacific area, and are not large.

The industry's cost structure, once the shock of quadrupled oil prices had been absorbed, has proved resilient in both countries. Last year there were strikes, particularly in the western U.S., which helped to make the newsprint market tighter than at any time since the commodity boom of 1973. There are more negotiations in the U.S. this year, and while western Canada has mostly settled wages for a couple of years, the possibility of a strike in the east this spring cannot be written off.

More investment

Most important has been the three-year resurgence in profits, which has given the industry the ability to finance not only urgent environmental improvements but also to invest once again in new mills and machines, speed-ups, productivity improvements and the application of electronics to machine control and quality measurement. The industry has always been to the fore in the use of alternative fuels, more efficient heat systems and in the use of tree residues as fuel.

The recession the U.S. expected to arrive last autumn, has been delayed despite the rise of money costs to new record highs. It is now expected to show up without fail in the second quarter of this year, though already there are distinct signs that the money crunch may have passed its peak, negative growth may well continue throughout—with recovery delayed until the second quarter of 1981.

However, while the immediate impact of record high interest rates was felt in demand for housing timber, down around 50 per cent at wholesale prices from the 1979 highs, it will take pretty well all this year to complete rebuilding of newsprint stocks to the traditional 45 days' supply. Certainly in the first quarter newsprint and paper demand has continued very strong, perhaps influenced by the possibility of a strike in the eastern Canadian mills, which normally sell most of their output to the U.S.

There is no doubt the industry in North America will continue the largest single force in world paper for many years to come, despite the natural advantages of some new producers.

Most major Canadian pulp and paper groups are also relatively large timber producers, particularly in Western Canada, and during U.S. recessions demand for housing timber is the first area to weaken. On the other hand, as the American economy is stimulated, housing is the first to pick up, bringing about dramatic increases in prices.

This pattern will probably be repeated in the present U.S. economic cycle.

Abitibi-Price Co, a merger which followed the last crisis in the Canadian industry, is a major exporter to the U.S. and Europe and isy now the world's largest single producer of newsprint. Its experience in the first quarter of this year may well be typical of the larger diversified eastern Canadian comapnies. It is a major producer of timber and fine papers and has a jointly owned base metals mine in Ontario.

First quarter earnings were Can.$34.6m against Can.$22m a year earlier on sales of Can.$386m against Can.$354m. Planned expansions will bring newsprint capacity to 2¼m tonnes by 1985, up 15 per cent. The company foresees the possibility for surplus capacity in its mills appearing briefly around 1982 because several Canadian mill expansions are due on stream in that year.

Roughly half the profits of companies such as Abitibi Price come from exchange gains on U.S. sales—forest products prices are set by the U.S. market. The companies are nervous about the Canadian dollar being pushed up by continuing oil discoveries off the east coast and in Western Canada, which in effect would limit their profits. This seems less an immediate danger since the Trudeau Government may well be looking for the opportunity to use capital inflows to allow a lower interest rate policy in Canada.

The one spectacular failure in North America in the past two years of pulp and paper prosperity has been the shutdown of the Port Cartier, Quebec, dissolving pulp mill of ITT Rayonier because of persistently high wood costs and union problems. No re-start or reconstruction of the mill is likely for at least two years.

In Canada newsprint mill expansions and speed-ups due on stream by the end of 1982 total about 1.2m tonnes of annual production above the present 9¼m tonnes capacity. A new green-site mill now costs about Can.$1,500 per tonne capacity more in Canada than in the U.S., mainly because of higher Canadian construction costs. Canadian expansions are spread across the country and include new capacity in Alberta. Prospective newsprint expansions in the U.S. by end of 1982 total nearly 800,000 tonnes and would bring total capacity to nearly 5m tonnes.

Robert Gibbens

European markets more bouyant

FOR THE West European paper industry, 1979 turned out to be a better year than expected. True, the problems of re latively strong domestic currencies led to further import penetration but this was overshadowed, in most cases, by the buoyancy of the overall market.

West European consumption of paper and board is estimated to have risen 6 per cent in 1979 and production was up by 7 per cent. The EEC, as a group, probably consumed around 33m tonnes last year, of which three quarters was produced domestically. Shipments of market pulp (the industry's main raw material) to Western Europe rose by 6 per cent to 9.5m tonnes.

Sweden continues to supply around 25 per cent of the European market with market pulp, followed by Canada (21 per cent), Finland (13 per cent) and the U.S. (11 per cent).

Within Western Europe, the actual performance of individual countries varied considerably. In Germany, which is the EEC's largest producers, paper and board production rose by 8.0 per cent to 7.4m tonnes. This was double the growth rate in the previous year. In France, the industry also expanded faster, with output up by some 6.0 per cent at 5.3m tonnes. The same wenut for Italy where paper and board production was running some 11.5 per cent higher in the first nine months of 1979.

In Belgium, production rose by a hefty 8 per cent last year and only the British industry seems to have failed to participate in the upswing. The growth of UK output of paper and board slowed to 1.1 per cent in 1979. UK consumption was very buoyant but virtually all the growth was taken by imports.

Indeed, the overall UK performance would have looked considerably worse had it not been for a 14 per cent plus increase in UK newsprint production. This accounted for all the growth in the UK market.

Board pro

UK output of printings and writings, which had grown by an above average 6.8 per cent in the previous year, fell marginally in 1979. Meanwhile, board output which used to account for over a quarter of total UK production, continued to fall steadily. Thames Board Mills (part of Unilever) announced that it was stopping board production at its South Purfleet Mill.

The combination of a strong domestic currency plus a high domestic rate of inflation has taken its toll of the UK industry and imports now account for about half total consumption, compared with 40 per cent in Germany and a third in France.

West German consumption of paper and board rose by 8.6 per cent to a new record of 9.5m tonnes in 1979. Among the sectors recording above-average growth were graphic papers (plus 10.2 per cent) and hygenic papers (plus 10.3 per cent). Paper and board imports rose by 12.1 per cent to a new peak of 3.8m tonnes but exports also hit a new peak of 1.7m tonnes—14 per cent up on 1978.

According to the German Paper Association, the industry had some success in increasing the use of wastepaper and reducing its energy costs in 1979. Close to half the country's paper and board production is now produced from wastepaper (3.2m tonnes), and the industry managed to cut its energy usage per tonne of paper, by 4 per cent last year.

Within the German industry, the process of closing down smaller mills and forming bigger units continues apace. Since 1973 over 60 paper mills have been closed and around 100 paper and board machines scrapped. At the end of 1979 there were 230 paper mills operating in Germany and around 450 paper machines—giving an average machine capacity of 18,000 tons. The industry expects to invest over $400m on new equipment this year.

The French industry also had a very good year in 1979. Per capita consumption rose to 117 kg and overall consumption was up by 8.5 per cent at 6.25m tonnes. Tissue production rose by 11.7 per cent to 174,000 tonnes and packaging paper output was up by 6.8 per cent at 2.1m tonnes. French paper exports rose by just under 17 per cent to over 1m tonnes—over half of which was accounted for by graphic papers.

In the first few months of this year European paper production is holding up relatively well, but no one is expecting that 1980 will be as good a year as 1979. Some analysts are talking about a 1-2 per cent growth in the European market this year although in certain important countries, such as the UK, output could fall by a couple of per centage points.

Although production is forecast to recover in the early 1980s, the overall growth of the West European market seems bound to slow. In the important printing and writings market, English China Clays has forecast that European consumption will grow by only 2.1 per cent per annum over the period 1978-1983.

At the moment, just under two-thirds of the market is made up of uncoated papers and the rest is coated. According to English China Clays, coated paper consumption is going to grow by 3.4 per cent per annum—more than twice as fast as uncoated papers. The latter is forecast to grow by 1.3 per cent per annum over the period 1978-83.

Until now, European coated paper production has been supported by exports to places like North America. However, there are now signs that the industry is moving into a period of prolonged overcapacity.

America has been investing in new light weight coated paper capacity, in particular, and European sales to the U.S. are going to suffer. According to Pulp and Paper International, these were running at 140,000 tonnes per year a couple of years ago but will be down to 70,000 tonnes in the current year, and by 1982 the U.S. could be exporting to Europe.

Feldmuehle, West Germany's biggest paper company, has forecast that there will be 600,000 tonnes overcapacity in Western Europe, equivalent to 25 per cent of the market, by 1983/84 if current expansion plans are completed. It expects Western European consumption of light weight coated paper to rise by 250,000 tonnes to 1.75m tonnes per annum by 1983.

If all the expansion plans go ahead there will be an extra 800,000 tonnes of annual capacity. Feldmuehle has estimated that Italy will have 210,000 tonnes overcapacity in the light weight coated grades, France will have 140,000 tonnes overcapacity and Finland 150,000 tonnes. Against this background Feldmuehle is not at all optimistic about the future profitability of this part of the European paper industry.

Tariff barriers

Aside from the threat of overcapacity in certain sectors the other main concern of the European industry is the progressive reduction in tariff barriers. Without the benefit of the huge forest resources and large integrated mills of Scandinavia and North America, EEC producers feel vulnerable.

Import penetration is creeping up in most countries, and local producers are always on the look out for what the industry refers to as "scissors" pricing. This occurs when a major producer raises his pulp prices, thereby increasing the cost of the EEC paper producers' main raw material, but cuts his own paper prices. In such circumstances the EEC producers find it hard to make a living.

However, the Scandinavian livingproducers realise that it is in their interests to work with the EEC producers rather than put them out of business and for this reason there is a t endency for greater vertical integration in the major European markets.

William Hall

Mood of optimism

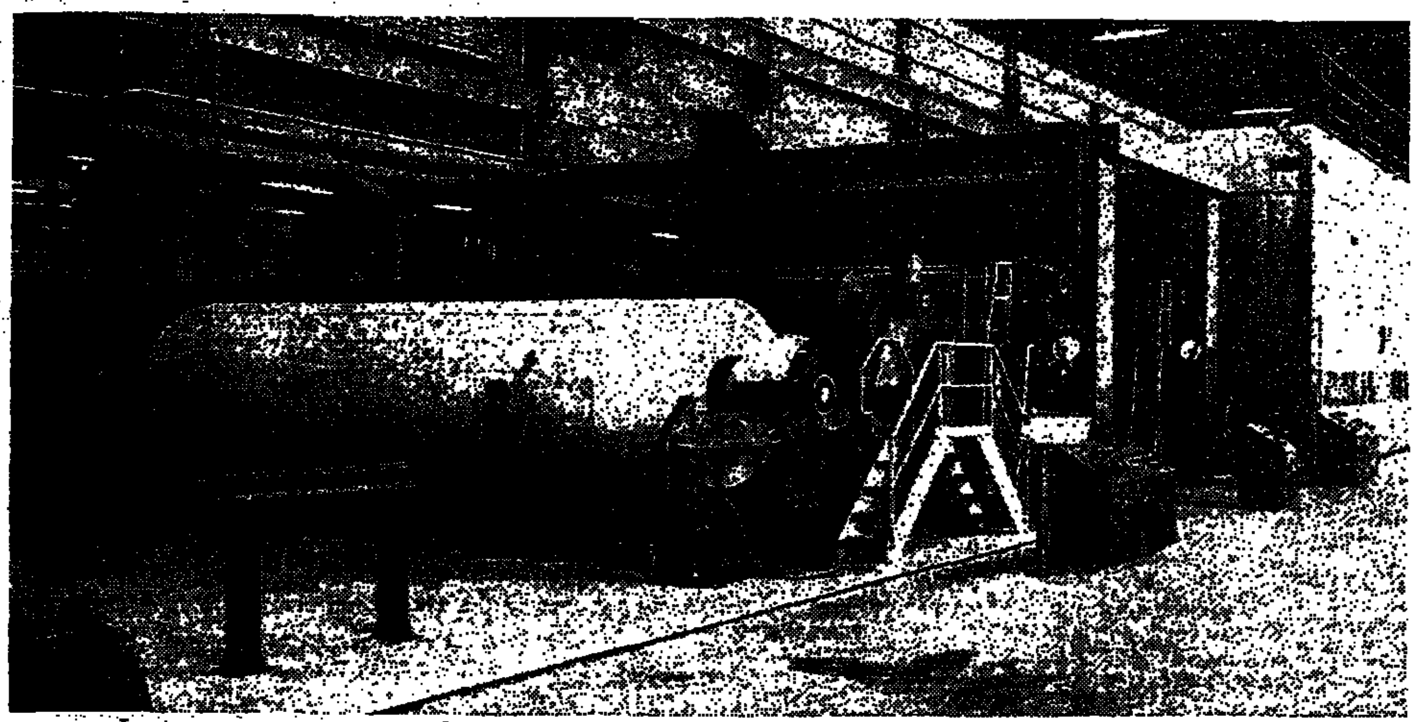
CONTINUED FROM PREVIOUS PAGE

has slowed following the sharp rise in oil prices during the 1970s. With electronic systems, the future is less clear.

In the past the advent of new communications media, such as TV and radio, has not proved as critical as the pessimists first forecast. Newspapers continued to flourish and people still read books. Any slackening in growth has been more than compensated for by the development of new uses for paper and this evolution is bound to continue.

For the industrialised countries, which control over four-fifths of the world's papermaking capacity, there may well be some clouds on the long-term horizon. But for the developing countries there is no such problem. The differences in per capita consumption between places such as India and the U.S. is vast and the mere process of catching up will ensure that the world paper industry will remain one of the world's major growth industries for the next few decades.

* *Some major developments in the pulp and paper industry. English China Clays, January, 1980.*



Last year was a record production year for Swedish mills. Above: The Swedish Cellulose Company's paper factory at Ortviken

Encouraging year for Nordic manufacturers

THE NORDIC pulp and paper makers had a good year in 1979, with both production and exports climbing substantially and earnings recovering after *several poor profit years.* So far, in 1980, markets have been more firm than expected three months ago—the rise in the value of the dollar is pushing up export earnings and a second good profit year appears to be *developing, although many company* executives voice reservations about the second half.

The situation on the North American market now favours the Nordic producers. They had earlier feared that a reces*sion in the U.S. would curb* domestic demand for pulp and paper this year and prompt the North American companies to increase deliveries to Western Europe, as they did in 1975 and 1976.

Both *the sustained demand* and the rise in the North American mills' production costs as a result of new wage settlements now appear to have reduced that threat. The Swedish and Finnish pulp ex*porters could confidently* raise their prices by 9 per cent for second quarter delivery after increases in North American pulp prices.

The recent rise in the exchange rate of the dollar is also benefiting the *Nordic mills who* price their pulp and newsprint in dollars. The Swedes calculate, for instance, that each SKr 0.01 rise in the dollar rate adds SKr 20m (£2.08m or $4.4m) to their annual earnings. The *rate* has moved from SKr 4.10 to SKr 4.50 this year.

Consolidation

On the other hand, the mood in the Nordic industry falls far short of being euphoric. The 1979 recovery in profits only partially repairs the damage done by the losses of the three previous years and company financial directors speak in unison about the need to consolidate financial positions further.

Company Boards are also aware of rising energy costs, wood supply problems and high wood prices, all of which spell the need for investments in rationalisation and plant modernisation. In this respect, the improved earnings situation does appear to be generating more investment decisions this year.

Another bull factor is the growing fibre shortage in Western Europe which, in the long term, despite the flucutating competition from the North American mills, should offer the Nordic manufacturers an expanding market.

To make sure, more and more *Nordic companies are moving* directly into Western Europe through takeovers or joint ventures. The integration of the Nordic and West European industries is under way again.

● In Sweden, the mills produced more paper and board than in any previous year in 1979 after a 10 per cent climb *in output to 6.3m tonnes,* corresponding to 86 per cent of the paper industry's theoretical capacity. Exports were up by nine per cent to 4.7m tonnes and three-quarters of the production increaes were marketed *in Western Europe.*

Newsprint output jumped almost 230,00 tonnes to 1.48m tonnes with deliveries abroad rising roughly in proportion to 1.2m tonnes. In the other main qualities 983,000 of a 1.18m-*tonne kraft paper production* was exported; fine paper exports took 412,000 of the 624,000-tonne production total; and of the 375,000 tonnes of magazine paper manufactured, 213,000 tonnes found their way abroad. Kraft liner exports reached 881,000 tonnes from an output of just over 1m tonnes.

On the pulp side, developments in 1979 drew attention to one of the problems facing the Swedish industry. Output of market pulp grew by 4 per cent to 3.9m tonnes but deliveries exceeded 4m tonnes after the mills had drawn on stocks. Difficulties in obtaining enough pulpwood curtailed production which of theoretical capacity.
came out at about 81 per cent

The demand/supply situation was sufficiently tight for the mills to be able to raise prices in most pulp, paper and board grades. As a result, companies have been reporting a gratifying turn-round in profits, from a combined loss of about SKr 570m in 1978 to pre-tax earnings of SKr 1.9bn (£198m or $422m).

To put these earnings into perspective is must be recalled that the Swedish mills had combined losses *of around* SKr 2bn in 1977 and 1978, that the 1979 profits barely equal those of 1976 and are only half those recorded in 1975.

Moreover, performance varied markedly from company to com*pany. Of the SKr* 1.9bn pre-tax earnings Svenska Cellulosa (SCA) contributed SKr 537m and Stora Kopparberg SKr 430m while MoDo turned a 1978 loss of SKr 159m into pre-tax earnings of SKr 273m last year. At the other end of the scale, the State-owned ASSI continued to operate in the red, while the Government had to inject SKr 1.1bn in capital into the two largest companies owned by the forest-owner co-operatives. The State now owns 74 per cent of Norrlands *Skogagares Cellulosa* (NCB) and 40 per cent of Södra.

Both these concerns are having to trim back their operations. On the other hand, the promising 1980 outlook and the *result of the March* 23 national referendum on nuclear power, which ensured the industry of adequate energy supplies in the medium term, has revived investment interest in the leading companies.

SCA is going ahead with SKr 1.1bn investments in a new pulp plant, including chemical *thermo-mechanical pulp, and in* a conversion to fine paper production of a kraft paper mill. Stora Kopparberg has some SKr 700m in investment in the pipeline—mostly in printing papers—and Holmen Bruk is *now expected to proceed with* the expansion of newsprint capacity at its new Braviken plant.

Co-operation

Significantly, SCA's *new fine* paper mill entails co-operation with Papier Waldhofaschaffenburg AG of West Germany. Feldmühle, also of West Germany, is understood to be negotiating with the Munksjö and Kopparfors companies for shares in their pulp production.

Further evidence of the trend towards integration with the West European industry comes from MoDo, which, over the *past 18 months,* has bought up two French wholesalers, Grillet et Féau and Davupap, and Link Paper and Supplies in Britain, while Billerud's bid for Lafarge Emballage, one of France's largest packaging companies, *remains unresolved after* French Government intervention.

● In Finland, the pulp and paper industry performed even better than the Swedish mills last year. The pulp mills *operated at near full capacity* and increased output by 17.8 per cent to just over 7m tonnes.

Exports at 1.87bn tonnes were up by almost 22 per cent, as the Finnish mills took back market shares lost during the recession, while the 51 per cent rise in the value of pulp exports gives a fair measure of the price increases the Nordic mills were able to take in 1979.

Capacity utilisation in the Finnish paper and board mills *was over 90 per cent last year.* Exports rose by 9.8 per cent in volume and 18.9 per cent in value.

Paper exports, at 3.5m tonnes, were well ahead of the previous record year, in 1974, while board exports at 1.16m tonnes fell some 170,000 tonnes short of the 1974 total. The Finnish mills reached a new peak in newsprint exports with 1.39m tonnes delivered.

Not al lthe Finnish companies have reported their 1979 results in full, but—as with the Swedes —a strong improvement in earnings is already apparent. However, Mr. Matti Pekkanen, managing director of the Central Association of the Finnish Forest Industries, described profits as "on average unsatisfactory."

This is fair comment when the 1979 earnings are placed against the extraordinarily high indebtedness into which most Finnish companies fell during the 1976-78 recession. The Finns undoubtedly need another good profit year.

To damp inflation, Finland has adopted a policy of revaluing the Finnmark, the latest adjustment being made in March. These revaluations restrict the mills' export earnings but may be more than offset by reduced labour costs.

Last month the Finnish paperworkers' union accepted an average 9.5 per cent increase in annual incomes for its members. The Finnish millowners at least know where they stand on labour costs this year, whereas the Swedes are still waiting for a national settlement.

● *Norway's pulp and paper* industry is smaller than those of its two Nordic neighbours. It has fewer forest resources to call on, its market pulp output is now confined to some 240,000 tonnes and it has been steadily specialising in newsprint and other printing papers.

The Norwegian mills, too, benefited from the increased demand and higher prices for paper products on the West European market last year. Paper and board output reached 1.4m tonnes with exports just exceding 1m tonnes.

Newsprint production reached a record 568,000 tonnes, of which 462,000 tonnes were exported. Wood-container printing and writing papers were also well ahead of previous peak outputs at 245,000 tonnes with 195,000 tonnes going abroad. Altogether, the Norwegian mills earned Nkr 3.48bn (£310m, or $680m) in export revenues last year.

The Norwegian mills have been re-organising to take advantage of their obe major asset, relatively cheap hydro-electric power, and to make best use of their limited wood resources by moving into products which utilise timber to the maximum. Investment has been made in the areas of thermo-mechanical pulp and in printing papers. Newsprint capacity should reach around 1m tonnes a year by 1983.

William Dullforce

Finland's pulp and paper industry performed even better than the Swedish mills last year, with exports up by almost 22 per cent. Above: log handling in Finland, with a 30-ton Kone crane, fitted with a giant hydraulic grapple

Problems for newsprint producers

NEWSPRINT CONSUMPTION is a sensitive barometer of the state of the economies of the developed world. Newspapers live off advertising, and when economic activity is buoyant advertising is as well, and newsprint consumption increases.

Last year the demand for newsprint in the non-Communist world grew by around 3½ per cent to 22m tonnes, according to stockbrokers Phillips and Drew. In some countries production grew considerably faster.

Swedish production, for example, rose by 18 per cent to 1.5m tonnes and Finland increased its output by a similar amount to 1.3m tonnes. Even in the UK, where the industry is losing money, output rose by over 14 per cent.

The newsprint market is dominated by the U.S., which accounts for around 40 per cent of the world's consumption. The long-awaited slowdown in the U.S. economy took longer than expected to arrive, and U.S. newsprint consumption held up surprisingly well during 1979.

Having risen by 6 per cent in 1978, American consumption rose by another 3.4 per cent to a record 10.2m tonnes in 1979. Stocks of newsprint declined for most of the year and there were reports that some newspapers had to restrict their pagination because of newsprint shortages. For the first time for more than five years the U.S. started importing newsprint from elsewhere aside from Canada—principally Scandinavia, but the UK also exported some.

Canada is America's major source of supply and far and away the biggest producer of newsprint in the world. However, its production slipped by 1.2 per cent to 8.7m tonnes last year, mainly because of strikes at Canadian mills in British Coloumbia and New Brunswick.

The result was that supplies of newsprint were tight, in particular in North America, and newsprint prices hardened throughout the year. Standard newsprint prices in the U.S. started 1979 at $320 per short ton, were increased to $345 per ton in March, and to $375 per ton in September. Since the year-end they have been increased again to $400 per ton —an increase of 25 per cent in just over 12 months. In the previous 12 months they had remained unchanged.

The strength of U.S. newsprint prices, which have a big impact on world prices generally, caught many people by surprise since there had long been fears that the industry was just about to move into a period of serious overcapacity. Indeed, Phillips and Drew estimate that world capacity increased by 3.7 per cent last year, which was slightly faster than overall world demand.

This was a marked change from the previous year when world demand grew more than twice as fast as capacity. However, the decline in Canadian production offset the increased capacity and meant that the Scandinavians were eble to increase their exports sharply to meet the shortages. Overall Scandinavian exports were up by nearly a fifth to 2.8m tonnes in 1979.

The current year has started o ffwell. Consumption in the U.S. in the first two months of the year is running more than 2 per cent up on the comparable period of 1979 and although stock levels have been rising they are still well under the 40 days' supply long regarded as the normal level by the North American industry.

There are two main reasons why 1980 could be a relatively tight year for newsprint. It is an election year in America, and, if past performance is any guide, this normally stimulates newsprint consumption. In addition, there is the likelihood that some of the major Canadian mills will be hit by strikes as the wage bargaining season moves under way. Against this, the world economy is moving into recession and this is bound to affect demand for newsprint and put pressure on its price.

NEWSPRINT OUTPUT 1979

	'000 tonnes annual growth	%
Canada	8709	(1.2)
U.S.	3727	9.1
Japan	2556	3.4
Sweden	1483	17.9
Finland	1330	18.1
Germany	650*	n.a.
Norway	550†	18.0
UK	364	14.2

* Capacity. † Approximate.

Phillips and Drew are forecasting nil growth in newsprint demand in 1980 and a 3 per cent growth in world capacity. Most other commentators agree with this projection but further down uncertainty about the severity of the projected overcapacity in newsprint.

In the early 1980s, newsprint consumption in North America is expected to grow by 2.4 per cent per annum while new capacity could be growing by 6 per cent a year between 1981-1983. Projects have been announced for the next three years which will add 2.3m tonnes per year of extra capacity.

Publishers Paper, MacMillan Bloedel and North Pacific, for example, each have new 190,000 tonne per year newsprint projects scheduled to come on stream next year, according to Pulp and Paper International.

Forecasts of U.S. consumption by the mid-1980s differ considerably. Predicasts Inc. has forecast that U.S. consumption will rise from its current 10.2m tonnes a year to 12.9m tonnes per year by 1985.

The American Newspaper Publishers Association, by contrast, has forecast that U.S. consumption by 1985 will only amount to 11.3m tonnes. The 1.6m tonnes per annum variation between these two forecasts is equal to the output of an extra ten large paper machines. As each of these new machines costs over $200m at today's prices companies want to be sure about their sums before committing themselves to new capacity.

Against this uninspiring medium-term picture, it is difficult to be bullish about newsprint prices. Phillips and Drew believe that Canadian capacity utilisation, which is currently averaging 95 per cent, will drop back into the low 80s over the next few years. While this may not lead to cuts in listed prices it could lead to an outbreak of price discounting.

As a result of the weakness of the Canadian dollar, newsprint producers in Canada have been making handsome profits so they can afford to trim their margins. However, the Scandinavian newsprint producers are less sanguine about the outlook.

True, they have had a relatively good year in 1979 (the Finns, in particular), but the threat of overcapacity in North America is a very real worry for the major Scandinavian producers.

Assuming that the new North American capacity comes on stream over the next three years and capacity utilisation rates fall, then there could be another 2.5m-3m tonnes of North American newsprint overhanging the world market.

This is the equivalent of Scandinavia's entire newsprint exports, currently. Until now the Scandinavian's have sent most of their newsprint (some 75 per cent) into the Western European market.

NORTH AMERICAN NEWSPRINT CAPACITY
('000 tons)

	Canada	U.S.	Total	Share %
Abitibi Price	1,952	244	2,196	15.3
Intnl. Paper	1,133	294	1,427	10.0
Bowater Inc.*	557	730	1,287	9.0
MacMillan Bloedel	1,231	—	1,231	8.6
Cons. Bathurst	994	—	994	6.9
Ontario Paper	700	—	700	4.9
St. Regis	—	625	625	4.4
Kimberly-Clark	171	420	591	4.1
Kruger Pulp	486	—	486	3.4
Boise Cascade	230	250	480	3.4

* Does not include the 136,000 ton per year mill at Calhoun in Tennessee.
Source: Pulp and Paper International.

If, however, the Canadians were to start trying to effload their surplus newsprint on the Continental European markets —they already sell a hefty amount in the UK—then the Scandinavians could face a difficult time especially since their wood and energy costs are so much higher than equivalent North American costs.

The Scandinavians may well be worried about the Canadian threat to their traditional markets but the Canadian producers themselves are not without their own serious problems.

Aside from the threatened overcapacity, the biggest problem at the moment for Canada is its unduly heavy reliance on newsprint. Something like two thirds of the country's entire paper and board capacity is dedicated to newsprint.

Many Canadian paper machines are old and inefficient. According to a recent study by English China Clays, the average size of newsprint machines in Quebec and Ontario (which account for a quarter of the world's newsprint capacity) is 63,000 tonnes per year.

This is half the size of the newsprint machines located in the Southern states of the U.S. In addition to the economies of scale, newsprint producers in the American South also have the benefit of wood costs which are a third lower.

U.S. NEWSPRIINT PRICES

	$ per short ton
March 1974	202.75
May 1974	213.25
August 1974	234.75
January 1975	270.00
January 1976	285.00
December 1976	305.00
April 1978	320.00
March 1979	345.00
September 1979	375.00
May 1980	400.00

For these reasons, Canadian producers are having to face up to the steady drift southwards of newsprint production. Virtually all the big new newsprint projects in North America are being located in either British Columbia, the West Coast of the U.S. or the Southern states.

Eastern Canadian newsprint producers are trying to diversify into higher quality paper such as lightweight paper more skilled technology.

W. H.

Tighter controls on pollution

THE CAPITAL spending programmes of world paper and pulp manufacturers increasingly reflect the need to invest in equipment to protect the environment. At the same time, more waste paper is being recycled and attention is being focussed on the need for long term forestry programmes.

The driving force behind these changes in production and raw material usage is in part the strength of the environmental lobbies. In the wake of pressure from lobby groups has come legislation in many countries and a new approach to environmental problems of production and waste.

Although the pressure groups, such as Friends of the Earth, in the UK, believe far more could and should be done, if necessary through legislation, there are indications that the industry and Governments are responding to their basic arguments.

The most obvious example of this response is in the field of pollution control. Legislation controlling both air and water polution is being tightened up in stages by many countries.

In the U.S., environmental protection is now seen as a major factor affecting new investment programmes. Figures published by the American Paper Institute in December suggest that investment in equipment needed to meet new water standards totalled $0.3bn last year. During the past 10 years the industry has spent almost $4bn on pollution control equipment improving air, water and solid waste treatment.

The U.S. industry now faces a new wave of capital expenditure to meet 1984 water standards as well as new air and solid waste regulations. The cost to the industry of meeting these requirements is still uncertain. However, it is likely that out of total capital spending in 1980 of over $8bn, about $0.5bn will be spent on improved water treatment plant and a further $0.3bn on air pollution control equipment.

Industry's claim

The primary pollution problem for the industry in general is one of controlling the effect on the environment of the effluent produced during the production process. One impact of the growing concern over environmental pollution has been to strengthen the case for substitution of the sulphate pulping process.

In the UK, the industry is one of the biggest and, the industry claims, the most efficient users of water, consuming 1.2m cubic metres of water a day for process and cooling purposes—enough to supply a city of 9m people.

The effluent from mills carries with it fibres of cellulose, clay and dissolved organic matter. All these by-products can disfigure a stream reducing its capacity to support plant and animal life and promoting the growth of sewage fungus unless the effluent is suitably treated and controlled.

In the UK, most mills discharge effluent into public sewers, for which they are charged, or into non-tidal streams or controlled tidal estuaries.

Rather than set blanket water pollution restrictions, the UK Government has — up to now —allowed the water authorities to set local standards of pollution control for mills. The 1974 Control of Pollution Act, which is being implemented in stages, will bring all effluent discharges — including those hitherto uncontrolled discharges into estuaries and tidal waters — under the control of the water authorities.

Because of the rising cost of water and the need to control pollution the industry is developing water recycling processes resulting in less overall water usage — savings of up to 90 per cent have been achieved, less fibre is lst and there is less risk of pollution.

In 1974, equipment installed to recover fibres from effluent recovered 128,861 tonnes of pulp worth about £9m—double the cost of the plant.

In the 11 years to the end of 1974 the UK industry spent almost £13m on effluent treatment and a further £2m has been spent during the past five years. This expenditure is now likely to be stepped up because of the impact of the 1974 Act. Currently, in the UK, between 2 and 10 per cent of a company's annual expenditure is attributed to relocation of the environment.

Some of the largest mills are sited on tidal waters which will now come under water authority pollution controls. As a result, the British Paper and Board Federation estimates that these mills will have to spend £18m over the next ten years on effluent control equipment. In total, hte Act's provisions are likely to result in capital spending of over £20m on new plant.

While the industry accepts the principle of "the polluter pays," it is concerned that a reasonable time period should be allowed for financing new pollution control equipment.

The industry also points out that elsewhere in Europe pollution abatement schemes have been aided by Government funds. For example, in Sweden, which began an extensive anti-pollution drive in 1972, the Government met 75 per cent of the cost approved effluent plant.

In contrast to many other countries Sweden did not introduce official standards to which companies had to comply. Instead the problem was tackled through co-operation and joint research by the industry and the Government.

Economic limits

Nevertheles, the legal requirement that industry must avoid damage to the environment as far as it is technically possible and within reasonable economic limits has led to extensive capital spending in the last decade.

The industry in Europe is now most concerned with an EEC draft directive on pollution incorporating the dual approach of uniform fixed emission standards—strongly resisted by the industry and UK Government—and a more flexible standard based on local environmental conditions. This directive, together with other EEC pressures and national legislation could significantly increase the amounts spent on anti pollution systems.

The European Commission is also becoming increasingly involved in the debate on waste and in particular the recycling

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Investment on a major scale

A COUPLE of years ago, Jaako Pöyry, the Finnish paper industry consultants, forecast that the world's paper industry would have to intall about 120-130 paper machines a year, over the next five years, to keep up with the estimated growth in demand. This involved a five-year investment of the order of $100bn.

Since then, growth forecasts have been revised downwards and some of the more heady expansion plans have been pigeon-holed. Nevertheless, the world paper industry is still probably spending upwards of $15bn a year on new plant and equipment, and with inflation, this will soon be running at more than $20bn a year.

The paper industry is a very capital intensive business. In order to reap the economies of scale, a new newsprint machine has to have a capacity of more than 150,000 tonnes per year, a pulp mill has to have a capacity of at least 250,000 tonnes per year, and a single kraft liner machine is likely to have a capacity of between 300,000 and 400,000 tonnes per year.

At present day prices, a newsprint machine can cost $200m and an integrated pulp mill could cost at laest double that figure. The U.S. industry alone spent nearly $5bn on new equipment last year and will spend $5.5bn in 1980 according to the latest McGraw Hill survey. Several U.S. companies, such as International Paper and Champion International, have announced multi-billion dollar investment programmes for the next few years.

Union Camp Corporation will bring on stream, later this year, a 350,000 ton-per-year kraft linerboard mill in Montgomery, Alabama, and International Paper should complete a 460,000 tones per year kraft linerboard project at Mansfield, Louisiana, next year. This gives a flavour of the sort of projects in the pipeline.

While North America still accounts for the lion's share of capital spending, there are some very major projects under way in other parts of the world. Most people are familiar with the big scheme under consideration in Brazil such as the huge Jari project, but there are also sizeable developments in other developing countries.

Sources of data

There are numerous sources of information about the growth of the world's paper and pulp capacity. In North America, both the American Paper Institute and the Canadian Pulp and Paper Association publish details of industry expansion plans.

Trade journals such as Paper, or Pulp and Paper International (PPI) also do regular surveys o findustry expansion plans. According to the latest PPI survey, for example, the world's paper and board capacity will be increased by 20.1m tonnes between now and 1983. There will be 5.3m tonnes of extra newsprint capacity, 6.7m tonnes of printings and writings, 5.8m tonnes of packaging (including kraft liner), 0.8m tonnes of tissues and 1.5m tonnes of other papers and board.

However, far and away the best source of information about the expansion plans of the world paper industry is the annual survey of world pulp and paper capacity undertaken by the Food and Agricultural Organisation (FAO) of the United Nations.

According to the latest FAO survey, covering the period 1978-83, the world capacity of paper grades of pulp is expected to increase by some 19m tonnes to 164m tonnes by 1983. This is equivalent to an annual growth in capacity of 2.5 per cent.

Paper and paperboard capacity is forecast to increase somewhat faster, which is in line with recent experience. Overall paper and board capacity should increase by some 26m tonnes to 214m tonnes in 1983.

At the pulp end of the industry, one of the main features of recent projects has been the sharp increase in thermo-mechanical pulp capacity. World capacity is expected to more than double over the next three years.

Very simply, paper is made from two types of pulp — mechanical and chemical. The former is made by grinding the logs together. It makes more efficient use of a tree, since there is far less waste, but many impurities remain. Consequently, mechanical pulp tends to be only used for low quality paper, such as newsprint.

With chemical pulp, the impurities are removed, as its name implies, chemically. It has a much wider range of uses and as a result there is three times as much chemical pulp capacity as mechanical capacity in the world today.

Because it is such a wasteful process and leads to serious pollution problems, scientists have been trying to find an alternative to chemical pulp for many years. One solution is thermo-mechanical pulping and, in areas such as Scandinavia where wood supplies are limiting future expansion, it can be a very attractive proposition. The one drawback is that it uses a lot of energy.

At the end of 1978, the FAO estimated that 3.2m tonnes or 2.4 per cent of the world's pulp capacity was thermo-mechanical. This is expected to grow to 7.0m tonnes by 1983.

Only some 10 per cent of the world's total pulp production reaches the world's markets—the rest is used by integrated mills. Canada is the biggest producer of market pulp accounting for about a quarter of world production. However, Brazil is bringing new capacity on tsream and will be supplying around 1m tonnes of market pulp this year. This will double by 1983.

In the area of paper and board, probably the most significant development recently, has been the sharp increase in projected newsprint capacity (see elsewhere in this survey). During the last five years, world capacity only grew by 1.7m tonnes but over the next five years it is expected to increase by 5.6m tonnes. The bulk of the new capacity will be installed in the developed market economies but there will also be substantial increases in Lating America and Africa.

The other phenomenon running through many of the projects now under discussion is the steady integration of the industry. In Scandinavia, in particular, competition from more productive forest producers closer to the Equator means that the Scandinavians are having to integrate their operations to a greater and greater extent.

Instead of producing just pulp and rough paper, such as newsprint, they are diversifying into higher value added products such as light, weight-coated papers. This is being viewed with some concern by many countries. Germany's Feldmuehle, for example, believes that if all the current projects for light, weight-coated paper are undertaken there will be 25 per cent overcapacity in the industry by 1983/84.

Apart from major investment in light-weight coated paper and cartonboard production (another area of over-capacity) the Scandinavians and North Americans are also diversifying more stealthily, buying up their former customers so that they have a captive market and a greater say in how their paper is ultimately sold.

Jaako Pöyry estimated in 1978 that North America controlled 11 per cent, and Scandinavia 6 per cent, of the EEC paper and board production. If anything, the involvement is likely to have increased since then. Two recent examples highlight the sorts of ways this involvement has manifested itself. Consolidated Bathurst of Canada is working on final plans for a 150,000 tonne per year newsprint mill in Scotland—it will be the majority partner. Meanwhile, Sweden's MoDo group recently took over a leading UK paper merchant.

It is in the developing countries, however, where the most exciting capital projects are to be found. The per capita consumption of paper ranges from 274 kg per head in the U.S. to 2.1 kg per head in India.

It has been argued that the minimum consumption should be of the order of 30 kg per head and this implies tremendous growth in paper making capacity in the developing countries. Paper and paperboard capacity in places like Iraq and Indonesia, for example, is forecast to treble between 1978 and 1983.

One of the major obstacles to growth in these areas is the shortage of finance. Foreign investors are reluctant to inject hundreds of millions of dollars if they are to remain minority partners. Problems such as these are not peculiar to paper projects, but they tend to be more talked about since paper is one of the main areas of growth in many developing countries as literacy levels rise.

Instead of investing in huge 250,000 ton per year projects the developing countries are being encouraged to lower their sights and start with smaller scale mills of around 40,000 tons per year capacity.

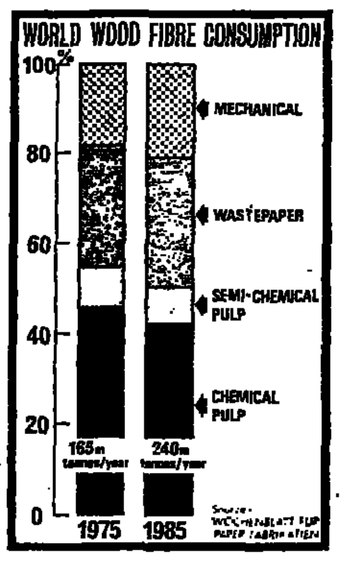
In areas of high unemployment economies of scale are far less important. The market is often not big enough to digest the output of a modern paper machine. In addition, smaller mills are easier to run, make less demands on skilled manpower and break down less frequently.

W. H.

WORLD PULP, PAPER AND PAPERBOARD CAPACITY, 1968-83

	Total Capacity				Annual Average Increase		
	1968	1973	1978	1983	1968-73	1973-78	1978-83
	million metric tons				per cent		
Total woodpulp, paper grades	98.1	120.0	134.9	152.0	4.1	2.4	2.4
Other Paper and Paperboard	80.1	100.3	118.5	132.7	4.6	3.4	2.3
Mechanical*	25.5	28.9	32.6	37.4	2.5	2.5	2.8
Semi-chemical**	7.0	9.8	10.4	11.6	7.2	1.2	2.1
Chemical	65.6	81.2	91.9	103.0	4.4	2.5	2.3
Other fibre pulp	7.1	7.8	10.4	12.5	1.9	5.9	3.8
Dissolving pulp	5.3	5.3	6.0	6.6	2.2	0.4	1.7
Total Paper and Paperboard	127.0	160.2	187.7	214.2	4.8	3.2	2.7
Newsprint	22.1	24.7	26.4	31.9	2.3	1.3	3.9
Printing and Writing	24.9	35.3	42.8	49.6	7.2	4.0	3.0

* including thermo mechanical pulp
** including chemi-groundweed
Source: Food and Agriculture Organisation of the United Nations, Pulp and Paper Capacity Survey, 1978-83.



Tighter controls

CONTINUED FROM PREVIOUS PAGE

of waste paper—a subject which will be discussed at an European conference on Waste Management in London in June.

It is perhaps the waste paper and packaging issues which have attracted most attention from environmental pressure groups, governments and the industry over the past decade. The proportion of waste paper recycled varies considerably from country to country. The proportion is affected by many factors including the availability and price of virgin pulp, the types of paper produced and the sophistication of waste paper collection systems.

In 1976/78, about 14m tons of waste paper were used in the production of paper and board, recycled and roughly 22 per cent of fibre consumed.

The percentage of waste paper recycled steadily declined in the 1960s, but in 1970s accounted for an increasing proportion because of the rising price of wood and environmental considerations.

Combination board consumed over 55 per cent of all waste paper used in paper and board in1978 or about 8m tons. Large amounts of waste paper are also used in producing newspapers, semi-chemical board print, tissue paper, printing and construction board and paper.

Not surprisingly, the U.S., Canada and the Scandanavian countries, with large indigenous pulp industries, use the least recycled paper in paper and board production.

However, perhaps because of the low base level and other factors including environmental pressure and Government intervention, it is in some of these countries that waste paper is increasing most rapidly.

In Sweden, a 1975 Government resolution provided for the compulsory collection of waste paper to be fully implemented by 1980. However, in recent years the capacity of the Swedish paper industry for recycling has expanded so rapidly that it has outstripped supply leading to the need for imports.

Last month, the Swedish Pulp and Paper Association warned of the need for further imports unless more paper collections were introduced on the scale envisgaed in the 1975 legislation.

Total consumption of waste paper increased considerably during the 1970s and as a result its share of the Swedish paper industry's fibre consumption grew from 6 per cent in 1970 to 10 per cent in 1979. The paper mills used about 635,000 tons of waste paper in 1979, an increase of almost 100,000 tons or 15 per cent over 1978.

The industry recovered about 30 per cent of newspaper per household in 1979 and the use of recycled newsprint increased by 38 per cent to 243,000 tons. A further increase in the use of de-inking machinery is expected to boost demand for recycled newspapers this year by u pto 80,000 tons.

In the U.S., progress has been less spectacular. However, last year paper and paperboard mills used a record 15.5m tons of recycled paper, five per cent more than in 1978. The American Paper Institute estimates that the industry's recovery rate from paper "available for recovery" was almost 32 per cent "continuing a steady improvement in recent years."

Among EEC members, 1973 figures suggest that the UK ranked third behind West Germany and Denmark in the use of recycled waste paper. UK consumption of waste paper has remained relatively static since 1973 although the latest figures from the industry suggest that in 1979 the industry used almost 2.2m tonnes of waste paper, 4.4 per cent more than in 1978.

Recycled waste paper is now the most important indigenous raw material for the UK industry, last year it represented 52 per cent of the total raw materials used compared to 38.5 per cent in 1968.

Som oef this recycled waste however represents manufacturers' "scrap" and the industry's own figures show that in 1979 only 28.6 per cent of the total 7.5 tonnes of paper and board actually consumed was recycled—a marginal increase over the 1968 figure of 26.6 per cent, but still a long way from the estimated 69 per cent of used paper and board which could be recovered.

£400m saved

Last year, the use of recycled waste in UK mills—over two thirds of which use some scrap—saved an estimated £400m in imported wood pulp costs.

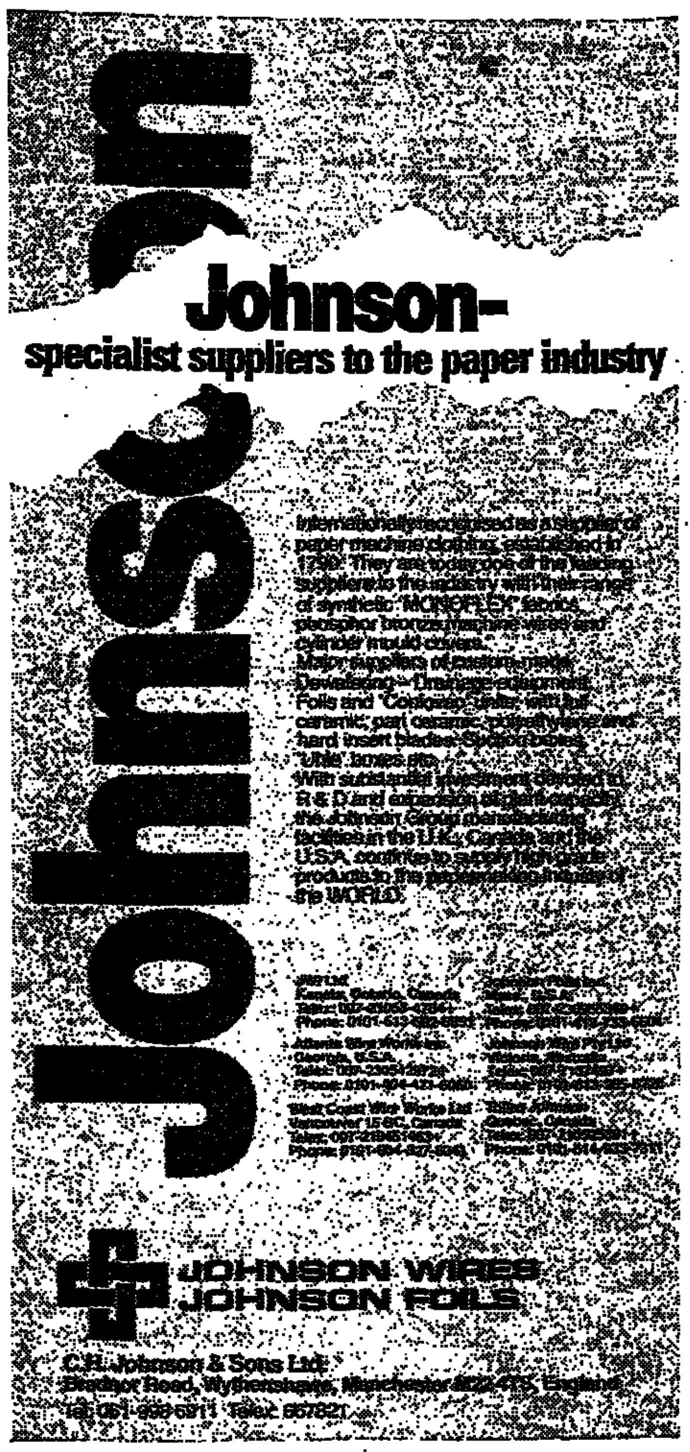
Pira, the research association for the industry, suggests that waste paper is used if it is availabel, if there is sufficient fibre cleaning equipment installed in a mill and if its price is less than 60 to 70 per cent of the price of the substituted virgin fibre.

The association is engaged in several research projects aimed at finding ways to extend the use of waste paper and overcome problems of production and product quality caused, for example, by adhesives on waste-paper.

Most of the waste paper which is recycled in the UK (82 per cent) is supplied by merchant processors. Waste paper recycled by local authorities has declined from 18.4 per cent of total waste paper consumption in 1970 to 9.7 per cent last year. In 1978, Friends of the Earth groups collected a further 3,000 tonnes of waste paper—0.15 per cent of UK waste paper consumption.

The market for waste paper is particularly sensitive to a range of fcators including price and demand—factors which the environmental groups argue limit unnecessarily the use of recycled paper.

Paul Taylor



WORLD PAPER AND PULP VI

Pressure on timber resources

WOOD, the raw material for pulp and paper, is one of the world's most important renewable natural resources. In theory, therefore, there should always be adequate supplies of timber available to meet requirements — unlike other industries which rely on resources that are becoming exhausted or increasingly difficult to recover.

However, theory does not always equate with actual practice. It is already becoming increasingly clear that considerable efforts will have to be made if the supply of timber is to match the growth in demand for wood—not only for pulp and paper, but also for its many other uses.

So far, the world has depended to a large extent on timber supplies drawn from forests built up over the centuries. But these standing resources are now starting to reach exhaustion. Even in the Amazon basin—there is increasing concern that something must be done to start renewing the forests being cut down in haphazard fashion.

Concern, so far, has been mainly centred on the threat to the ecological balance of the area, since trees play such an important part in retaining rainfall and preventing soil erosion. But, from a strict commercial point of view, it is equally important that "harvesting" of the world's forests is balanced by new plantings of species designed to provide the type of timber required inthe future.

In some countries—Canada, for example—the concept of the "perpetual forest" policy—with fellings being kept in line with new plantings—is well-established. But most timber-growing areas, particularly the developing countries badly in need of export earnings, there is a long way to go.

In addition, it is becoming obvious that the expansion of supplies to the required level can only be achieved by improved techniques of silviculture, including the introduction of new species catering for particular needs.

Only last month the Overseas Development Administration announced the financing of a study of the ecology of certain pine tree species in Latin America that may help the regeneration of forests throughout the developing world.

The pine forests of Central America are a major natural resource, the announcement noted, not only of marketable timber, but also of seeds in great demand for re-afforestation in tropical countries. The forests are, at present, being severely reduced by land clearance, exploitation and fire. Much basic data required to manage and regenerate the forests is lacking.

Similar work is going on throughout the rest of the world—encouraged, in recent years, by the recognition of timber as a renewable source of energy that must be made to help fill the gap as other sources, like oil, run out. However, there is a long way to go.

It is not just a question of producing new species of trees. They have to be matched with the growing conditions in particular areas, and also with the needs of the country.

In Britain, for example, it made a great deal of sense on the surface to concentrate on softwood pine trees to replace the forests cut down in the past, since pine trees are quicker to grow than hardwood and were able to supply a larger percentage of the UK timber requirements.

Disadvantages

But it is now realised that concentrating on pine trees had distinct ecological disadvantages in not providing a suitable habitat for wild life or the visiting public and also creating soil problems for agriculture areas nearby. Therefore, hardwoods are being added to the planting "mix."

There are a host of problems to be considered. First and foremost is the suitability of the species chosen to meet the needs of the domestic manufacturing and processing industries. It is pointless planting fast-growing trees if the timber produced is not suitable.

There is also the question of location and preserving the balance with agricultural land required to provide food. A major problem with natural forests has been that different species are dotted haphazardly around making it very difficult and expensive to secure specific types of timber. There is also the need to be close to reasonable transport routes otherwise the cost of transferring the timber for processing and eventually manufacturing can be prohibitive.

Above all, however, probably is the fact that timber growing normally often has to be confined to unfertile land areas, since farming for food usually takes precedence. In Britain, there has been considerable controversy between farming and forestry over the years, with farmers resenting the "grew wolf of forestry" eating into available land. This traditional rivalry has been lessened in recent years by the development of the joint farm and forestry approach, whereby each sector is designed to complement the other.

A proper balance is struck by deciding where trees can be planted to the benefit rather than the disadvantage of food production, bearing in mind that forestry is a long-term project while farming provides short-term returns.

One of the problems with timber-growing is, of course, that it is a long-term business requiring patient investment often in countries that cannot afford to put money virtually aside for such long periods.

A great deal of research is going into shortening the growing time for trees, particularly the type of species used for pulp manufacture. In Brazil, for instance, some new species take only a few years to reach maturity by taking full advantage of the local climatic conditions. No doubt further likely; indeed is essential if the supply of timber is to keep up with the forecast growth in pulp and paper manufacture.

Timber exporting countries are realising the potential for sales and acting accordingly. In the Philippines it is hoped to create a new timber industry as a by-product to a big new coconut replanting programme.

The Indonesian Government, early this month, announced tighter controls over the execution of agreements to ensure the proper implementation of forest concessions and that forest lands were recultivated with new seedlings. Most countries are now looking at their forests, and supplies of timber with new interest in view of the energy crisis and the tremendous scope for increased wood consumption.

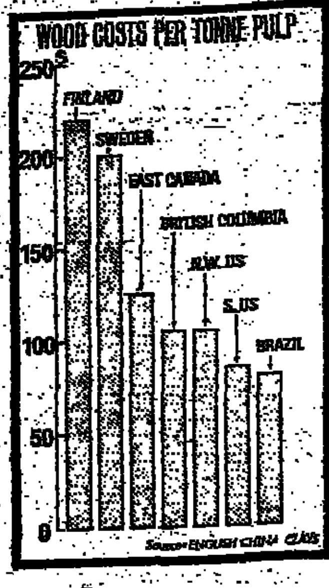
However, it is a slow and costly business, not helped by the ciclical rises and falls in demand for forest products. It is difficult not to see shortages, and much higher prices, in the years ahead.

John Edwards

WORLD FOREST RESOURCES

Million cubic metres	*Total standing timber*	*Total harvest*	*Industrial harvest†*
Canada	19,100	149	331
United States	20,193	345	331
Western Europe	8,280	219	191
Eastern Europe	3,513	80	67
USSR	74,710	389	315
Latin America		263	67
Africa		343	46
176,000			
Asia	10,400*	735	204
Oceania	1,239*	31	24

* Minimum estimate † Excluding fuelwood
Source: Shell group



New attack on traditional markets

OFFICES WITHOUT paper; filing systems replaced completely by computer memories—that is the forecast by the electronic pundits who are in favour of the electronics revolution and the arrival of the totally electronic or "paperless" office.

There are several developments which could result in the partial or total replacement of paper at work and even of household bills. Most of these developments are centred around the use of the ubiquitous computer.

In the office, computers generate vast amounts of information, much of which is eventually printed on paper. This includes invoices and other details which usually need to go through the post—only to be fed into another computer so that action can be taken. It is already possible to directly link up computers, via the public telecommunications network, so that it is feasible to send bills or invoices from one machine to the other without the need for paper (and postal charges) in between.

This could be further extended by linking up an office computer to the banks, so that a company could directly initiate debits and credits, payment of bills and salaries, through the computer system, storing all details within the computers' memories.

The concept of the electronic office involves not only external communications, but also methods of transferring information within an individual building. Secretaries operate electronic keyboards. Typed characters appear, not on a sheet on paper, but on the screen of a visual display unit, (VDU).

Typed information can be corrected and redrafted several times before it appears in a final paper form, using an electronic typewriter which is commonly known as a word processor. If the document has to be sent to another office, then it can be sent to another word processor and stored electronically until the recipient wants to read it or to obtain a print of it.

Word processors are already becoming familiar within Western industry and commerce, although the totally electronic office is still very much in the future. Many companies have produced word processors which can communicate directly with each other, thus providing an electronic inter-office mail service. Using computers for direct access to banks has been much discussed, but there has been little enthusiasm so far about the widescale introduction of such systems because of the implications for computer security.

Opportunities to reduce the many forms of paper communications are equally as numerous in the home, as they are in the office. For example, in Britain the Post Office has developed a home computer information service, called Prestel.

The system uses two familiar pieces of equipment in the home—the television set and the telephone. With the use of a decoder, it allows the subscriber to link directly to a giant computer many miles away. He can thus have access to a wide range of information which can be displayed on his television screen.

The subscriber has, in effect, a computer terminal in his home and this opens up many possibilities. The Post Office provides the basic network, but companies and organisations supplying information can pay a fee to so store data on the system. The subscriber then pays for the information he requests. Sometimes this data may be provided free, particularly if it is considered to be in the public interest.

Since Prestel is a two-way system—a company could offer goods and services to the network and the subscriber could then order these goods and services at the touch of a button. The central computer keeps a list of all users and "knows" which set is making the inquiry.

If the user places an order directly, then he could also pay for the goods at the same time by entering a credit card number or a bank number. It might be also possible, eventually, for subscribers to contact their banks through the network. Instructions could be sent to the banks to directly credit the suppliers, thus creating a new form of "armchair shopping."

Prestel reduces the need for paper in other ways too. For example, publishing companies could use the system to supplement their activities by supplying news summaries, classified advertisements, and details of coming events.

Prestel already provides such data as holiday and travel details, timetables, price guides, details of adult education courses, theatre and leisure guides.

It is even feasible to send messages over the Prestel network to other subscribers and this could become the basis of a world-wide electronic mail service. It would be cheaper than a conventional mail service—and delivery would be more reliable.

Once a Prestel decoder is built into a television set, it can be used to store many other forms of written information, electronically. An ordinary audio cassette can store many hundreds of pages of information—complete books could be kept on cassettes.

Publishers could use the Prestel network to deliver the text of books, magazines and even newspapers, to be stored electronically, on request, on the subscriber's cassette. The publisher would not need to produce a paper version of the text since he could store the work on a master file—which could easily be updated.

Many of these developments are still far into the future. Prestel has only recently been opened as a public service and there are now about 2,500 users. Several trial systems, based on the British design, are in operation in several other countries, including the U.S., West Germany and the Netherlands. Canada and France have developed their own systems, too.

There are some electronic systems which actually encourage the use of paper, rather than discourage it. For example, the humble office photocopier. There is also a growing demand for a system which allows documents to be transmitted electronically via a telephone line and reproduced in facsimile, many mile away.

Facsimile systems have for many years been used by newspaper and magazine group, but the system is now beginning to gain popularity in commerce.

Offices have also been pressed to adopt microfilm or microfiche systems, in which entire pages of information are reduced to the fraction of their former size on to a tiny piece of photographic film. Special viewers are required to read back the information. Various micro-film system are available, but there is still little sign that such methods of information storage have had a major impact on reducing the use of paper.

Elaine Williams

هكذا من الأهل

THE ARTS

Television

No falling standards here

by CHRIS DUNKLEY

In 1680 Europeans were listening to Monteverdi's *Orfeo*. In 1780 they were listening to Gluck's *Iphigénie en Tauride* and Mozart was busy writing *Idomeneo*. In 1880 the Paris Opéra mounted its first production in Verdi's honour and enrolled him in the Legion of Honour. And in 1980?

In 1980, thanks to television, European music had "advanced" to the point where 450m people could listen simultaneously to Johnny Logan as he sang:

"Ah bin wading'
Search a long time
Looking' out fer you
But shore not there
What's another year."

And they could all see that Mr. Logan wore a black open-necked shirt, a white suite, a black mourning sash presumably indicating that all the wading was in vain, and an expression suggesting incipient nauseau.

When he finished the song Terry Wogan, the BBC's ultimate weapon in the ratings war—a sort of one-man MIRV—remarked that if the judges went for less of the "boom-bang-a-bang" this year and more for a ballad then Mr. Logan's effort ought to win. Sure enough, after the usual unconscionably tedious polyglot point totting, it did, proving that the BBC knows its Wogan, Wogan knows his Logan, and Logan knows his audience.

(Or rather the Press officer of Radio Telefis Eireann knows his audience; he it was who wrote the song and, according to Wogan, paraded at The Hague in a tee shirt declaring: "It is imperative that I win this contest.")

Above all, though, the *Eurovision Song Contest* proved yet again that with television the size of the audience varies in inverse proportion to the ghastliness of the programme. But before getting too upset about that we should remember that the same applies to almost all forms of art and entertainment. A marvellous book such as Barbara Tuchman's "A Distant Mirror" will be read by a relatively tiny minority of people while Harold Robbins' latest product will be consumed by millions. The RSC's excellent O'Casey revival will run—with luck—for a few weeks while *Rip Off* at the Windmill goes into its fifth year.

There is, however ,one interesting difference: while serious arts pages and review sections continue to ignore pulp fiction and mindless theatrical entertainments even when they attract the largest audiences in their fields, television's equivalent rubbish receives more and more attention, serious and otherwise, simply because The Eurovision Song Contest and its like get into everyone's home, critics and commentators' included, whereas nobody bothers to supply a copy of "Cupid Turns Kilelr" to the book reviewer.

The consequence is that the discriminating minority, seeing *television's meretricious content* attracting as much attention as the meritorious, start to bemoan declining cultural standards. They point out that in 1680 Europeans were listening to Monteverdi's Orfeo. . . and forget to add that this was true *only of a tiny minority* and that the public at large were *far* more interested in the balladeer's latest catchy little number called "Lilliburlero" or whatever.

Furthermore, they forget to add that while the average 17th-century citizen was lucky if he even knew of the existence of opera, virtually every one of the tens of millions of Britons who watched Saturday's song contest could have chosen instead to watcr a recording of the New *York Met's new production of Manon Lescaut*, which ran simultaneously on BBC 2 with Placido Domingo looking his youngest for ten years. The production was under-lit for television, and the interval material was pretty poor. But the singing was good and it was there in your sitting-room in stereophonic sound on Radio 3. What is more, it was only last year that BBC television made *Orfeo* itself available to practically the entire population.

More important still, it seems to me, has been the properly extensive coverage given during the uast fortnight to the inspiring *Young Musician of the Year* contest which has been screened very sensibly at a time when young children could watch. It would be difficult to exaggerate the sheer pleasure afforded by the performances in the various rounds and categories of this competition *as the parade of* youthful virtuosi was thinned dow nto Saturday's final four.

Watching such an astounding amount and variety of talent *day by day it would be difficult* to complain convincingly about a decline in cultural standards. It is humbling yet powerfully uplifting to hear so much that is so familiar and, further, to be introduced to so much utterly unfamiliar music, all of it played with such skill by a group of people who, elsewhere in their lives, are still milk monitors and Girl Guides.

In place of some of Humphrey Burton's kindly intended and strictly non-partisan remarks and his almost obsessive straining towards the banal presumably in order to avoid "elitist" musical comment I would have welcomed a few straightforward bits of information such as what exactly you have to do to produce sound *from an oboe—the instrument* with which 18-year-old Nicholas Daniel deservedly took the title—or whether cuts are a hazard of fast cello fingering, and how well the accompanists know the soloists. But I do recognise that he faces a problem similar to that of sports commentators trying to bit some median point between the needs of experts and novices among the viewers.

Tht, anyway, is a detail. The important point is that the competition represented a granite outcrop of quality on the margarine mountain of competitions financed by the BBC which have merely quantit—*i.e.,* ratings—as their object. Though there is a lot they have yet to do for similar promotions in dance, drama and other sorts of music, the *Young Musician of the Year* contest is at least a wonderful start in putting some depth of quality behind the vast breadth of shallow trivia represented by such BBC ventures as darts competitions, *It's a Knockout* and "*pro-celebrity*" *golf.*

I have to add furthermore that in heartening confutation of pessimistic comments in this column earlier in the year, *television has also been supplying* material of startlingly high quality in drama recently. For instance, Simon Langton has made a visually impressive job of his three part adaptation of *The Gate of Eden* for Yorkshire TV, using everything from fawn duffle coats and maroon drape jackets to clips from *The Grove Family* and old pound notes to evoke the period. The uptight Englishness of the story of adolescent development is particularly intriguing as a contrast to "Catcher in the Rye" which describes the same subject at the same date from a strkingly American viewpoint. *The Gate of Eden has been somewhat slow* an dsometimes literary in tone (I found myself thinking what a good novel it would make) yet still keenly redolent of an era.

A Question Of Guilt was an excelent eight-part BBC2 serial written by David Livingstone and immaculately directed by *Paul Annett, telling the nasty* but fascinating story of a classic Victorian middle-class murder, the production being marked by all the scrupulous accuracy in detail that we have come to associate with BBC costume drama at its best.

Set in a later period, and directed by Mike Radford in a much more spare style, was Sunday night's *The White Bird Passes.* This too re-created a true story—of poverty in a Scottish slum of the 1920s—and featured memorably poignant performances from Vicki Masson as a nine-year-old girl and Isobel Black as her beautiful but syphilitic prostitute mother. For the end of his story Radford went to the actual subject of the drama, Jessie Kesson, to produce an interview of *such* extreme professional integrity (no cutaways, no reverses, not event a dissolve, only fades to black) and so *static* thta it was positively austere. Yet the heartstring-tugging period drama and the modern interview worked surprisingly well together.

Remember that BBC1 "Play For Today" in the same week was *The Executioner* by Lionel Goldstein (a name new to me, but one to remember) and it is plain that there is no justification for complaints about falling standards. This master*fully constructed, absorbing* and thoughtful work about the nature of self knowledge and the need for the older generation to remember and describe the Holocaust and for the younger generation to listen, was the best single play so far this year.

No doubt it attracted a mere 1½ per cent or so of the audience amassed by the Bomm-Bang-A-Bang brigade but then it is almost certainly more than Monteverdi's *Orfeo* has yet managed even adding together all its performances since 1607.

Mary Riggans, Isobel Black and Vicki Masson in The White Bird Passes

Covent Garden

Die Zauberflöte by MAX LOPPERT

Monday's revival of the year-old Royal Opera *Zauberflöte* lacked real distinction. August *Everding's production rehearsed* now by Christopher Renshaw),is busy with ideas, a few original and interesting, some mildly and harmlessly inventive, too many irritating facetious and cute. Like the designs of Jürgen Rose, a jumble of rococo and earl-Romantic styles and manners of similarly mixed quality, it is a production eclectic in a way that decorates rather than illuminates the subject; there is little that seems to spring from fresh, thoughtful engagement with Mozart or Schikaneder. The effect of the performance as a whole wa sneatly contrived *skimming of surfaces releasing* neither the bubbles of sublime of sublime meriment nor the flashes of solemn and piercing beauty by which a successful *Flute* is measured.

Stronger musical direction might have supplied the much-needed ballast. James Conlon, the young American conductor, has clearly given the score much consideration, for he brings to it a careful, serious approach—of that, the precisely weighted and differentiated accents, rests, and phrase-shapes in the overture were immediate proof. His first *London Flute*, correct in the German signification of the word, wanted colour, dramatic energy, and variety. The arias cried out for more thrustful moulding. The dialogue between prince and old priest gathered little intensity. In the second act, where the seasoned *Mozartian* manages to sustain momentum through difficult changes of scene, the feeling was fragmentary—the chorus "O Isis und Osiris, welche Wonne!", particularly, went off at half cock. Mr. Conlon is a musician of undoubted gifts; on this evidence, his engagement to conduct *Die Zauberflöte* at Covent Garden seems premature.

Leonard Burt

Kiri te Kanawa as Pamina and Thomas Allen as Papageno

Of a mainly proficient cast only Thomas Allen's Papageno operated consistently in three dimensions. The production does not stretch Mr. Allen's abaundant comic talents as other *Flutes* have done (and surely something altogether spicier was intended for the final duet of courtship than Everding's *kitsch-and-coo routines?); even* so, the easy theatrical command and the warm, sharply focussed baritone remained reliable sources of pleasure. A veil on the tone (some unannounced affliction?) prevented the first London Pamina of Kiri te Kanawa from fulfilling all its promise—there were many beautifully taken phrases, and the presence was sweet and girlish, but the expected house-filling radiance was *missing.* Stuart Burrows' long-familiar Tamino has retained its poise and smoothness, if not its remembered youthful ardour; in *the portrait aria* the style was soft-centred, and sentimentality was only just kept at bay.

The outfitting of the priests *in frock coats, the suggestion* of a Freemasons' Lodge as obvious as a nudge in the ribs, was not one of Everding's happier fancies; in voice at least, Robert Lloyd's Sarastro was firm, mellow, and dignified. Decked out in hostess garb, the Queen's party was allowed little greater physical conviction; in any case, this side of the contest was noticeably weakened by the mousy though accurate sing*ing of the Queen herself* (Zdzislawa Donat) and by an unacceptably soubrettish First Lady. Donald McIntyre's Speaker and Robert Tear's First Armed Man were both strong and telling. Miss Donat apart, it is a cast of native English speakers. The fact that the *delivery of the German dialogue* reaches a commendable general level failed to banish thoughts, during some of the evening's troughs, of how much more vivid and immediate an English-language performance might have been.

Royal Exchange, Manchester

Blood Black & Gold

by MICHAEL COVENEY

If ever there was an odd Irish stew of a play this is it. You sit there not so much following the stor yas ticking off the ingredients, as a troupe of snow-white dancing girls descend on a mysterious fairground wher ethe leather-clad waltzer boys have direct access to a Gaelic nether world of bearded witches, defrocked *alcoholic priests and geological* bowel movements. On one level it is like *The Boyfriend* sifted through Euripedes and dipped in a pot of David Rudkin at his most infuriatingly mythological. On another, on ethinks of the *Dybbuk*, with the Jewish dancing girl meeting her fate as a *chield of God* in the arms of a subterranean Nijinsky who is first seen hovering at a rehearsal room window like the spectre of a cankered rose.

Gerard McLarnon is the author and he marshals his threatrical effects with the confidence of someone who knows what he's *up to. If only* I did. The priest is choking on God, having achieved a horribly literal transubstantiation scene at the altar. He dies, dropping "dead as the fart of Pharoah" only to rise at the incantation of the bearded witch, played by Dilys Hamlett with the subtlety of Cassandra *on speed*, spewing her lines as is gargling iron filings.

Everyone swallows something however hard (like the play) and is, in turn, swallowed. The King of the *fairground* boys (Nick Stringer) makes a match with the dancing instructor (the excellent Carmel McSharry) only to be consumed by a festival bull. The witch and her coven penetrate the underworld in search of the priest, and a huge black gauze tent closes around them. Off they go and, as Judith (Clare Higgings) lies down for a mystical breather with the re-born clergyman, the bull trundles on with ten pairs of legs emitting the chant "Eat us, eat us, eat us, etc."

Perhaps Braham Murray's production might have held together more coherently if Silver the priest had been played with an intensity more manic than is supplied by John Watts. Judging by an alarming, wide-eyed portrait in the programme, Mr. McLarnon himself might have fitted the bill. As it stands, you end up waiting for each new splutter of stage fireworks and not listening too hard to all the intervening guff about man becoming God or man controlling the universe. By the end, the introductory setting of a decorous arts festival being absorbed in the real rough world of a fairground has long been forgotten.

Wigmore Hall

Patricia Conti

The second, most enjoyable half of the recital given by Patricia Conti at the Wigmore Hall on Monday night was devoted to French music. Though officially a mezzo-*soprano, Miss Conti has* a weak lower register and the lack of resonance just where it was most needed, combined *with mushy German diction* rendered ineffective her interpretation of Schumann's *Frauenliebe und Leben* before the interval. Even the authoritative playing of the piano part by Geoffrey Parsons could not have this performance.

With the change of language and style to French, the singer, though her declamation required a firmer line, fiercer attack and, above all, crisper enunciation, was able to communicate her evident liking for the works that she sang. *La Mort de Cléopâtre*, the cantata with which Berlioz failed for the second time to win the Prix de Rome, covers a wide range both emotionally and musically. Miss Conti could not plumb the emotion any more deeply than she could sound the lower notes, but the top of the voice rang out freely and she shaded her tone appropriately, producing the authentic colours of the Berliozian palette.

Two songs by Chausson, "Les Papillons" and "Le Colibri," needed more strength as well as greater delicacy, although both the Butterflies and the Humming-bird benefited from the pianist's light though firm touch. For "Chanson perpetuelle," also by Chausson, Miss Conti and Mr. Parsons were joined by the Ealonian String Quartet. In this fascinating piece the singer gave welcome signs that she could, with much more careful attention to the meaning of the texts and the pronunciation of the words, become a rewarding interpreter of French song.

ELIZABETH FORBES

Elizabeth Hall

New London Consort

The music of the Spanish Renaissance offers an overabundance of material worth reviving. The greatest difficulty *investigators of the period* have, after selecting and editing the music, is ordering for concert performance in programmes and in halls far removed from the music's original social function and acoustic setting. Philip Pickett's imaginative selection of secular music from the time of Ferdinand and Isabella, *Cancionera Musical*, presented by his New London Consort at the Elizabeth Hall on Monday night, opted for variety and *contrast, and made it work.*

ach half of the concert was framed by noisy, concerted works using all the cornetts and sackbuts at the Consort's disposal. Smaller groups of players were used to present the same dance or chamber pieces in varying instrumentations, and each half included vocal and instrumental solos. The formula is a well-known one in early music circles, but it was employed with a welcome sense of proportion and discrimination on this occasion.

One liability is that individual musicians are not *afforded the opportunity to* settle in and establish a continuity of mood, as they would in a traditional recital. Sharp shifts of instrumental colour and texture work against cumulative effects and each separate piece must consequently establish its interpretative content as quickly and precisely as possible. David Roblou's slow, laboured harpsichord playing of two Cabezon dances suffered within this context; one felt he *was still playing himself in and* would relax into better performances if given the chance. As it was, his continual shifting between four keyboards could hardly promote calm and concentration. By contrast, Tom Finucane's lute and vihuela playing grew in fluency and blossomed in his one solo, a subtly phrased and coloured account of Josquin's chanson "Mille Regres," transcribed by Luis de Navaez.

Finucane and harpist Frances Kelly were excellent in support of the solo singers, a very positive contribution to the success of Catherine Bott's and John Potter's perfomances. "Claros y frescos rios" by Alonso de Mudarra was marvellously sung by soprano Bott. The urgency of her delivery, heightened by well-supported chest tones easily integrated into her clear middle register, made one want to hear all thirteen verses of this bleak and compelling ballad, not just the five ventured on Monday. Potter's fluent and easy tenor, and his natural communicativeness made easy work of the "Romance de Abindarraez," a Moorish tale by Diego Pisador.

Most of The New London Consort's musicians are well known, experienced hands on the early music circuit. The success of this concert was due in no small part to Pickett's *ability to encourage an overall* unanimity of style and delivery in his forces.

RICHARD JOSEPH

St. John's, Smith Square

Anne Queffélec

Miss Queffélec gave the BBC lunchtime recital on Monday in place of the indisposed Michel Béroff, and managed to keep a part of his programme—several of Debussy's *Etudes pour le Piano.* Her keyboard address is quite different from his, being specifically feminine, unassertive, indirect, full of chiaroscuro.

Nobody would play *Debussy's Etudes* as if they were technical studies; none of them would survive such treatment. They are studies in sensibility *par excellence*, and Miss Queffélec explored that vein exclusively. The repeated-note study was therefore more whimsically *suggestive than* brilliant, the study in fourths purely liquid; the octave study was really too lightly flicked at to sound *joyeux et emporté.* In the richest-textured music her strength was sometimes unequal to keeping the many *levels lucid*, but there was always a subtle imagination at work—and there were no *smudges* in the silvery whirl of "Pour les huit doigts."

This was poetic playing, certainly, and in Brahms' Variations and Fugue on a Theme of Handel Miss Queffélec offered more of the same. At its first appearance the theme was reflectively shaded, not set out candidly as the subject for later deliberations. The variations were developed with conviction, and with some power: the hunting-horn variation sprang away with fine resilience. The final fugue began *slowly* and tentatively, and steadily acquired breadth.

DAVID MURRAY

BAM Theatre, New York

Barbarians

by FRANK LIPSIUS

Maxim Gorky wrote *Barbarians* three years after *Lower Depths* as a study of the effect of emomunications, and in particular the railways, on rural, hidebound Russia. David Jones directs his BAM company as though the subject were a voluptuous and vivid boating party on a Renoir canvas. The light *and shadow bring a number of* characters into delightful relief, promising a sequel to the director's Royal Shakespeare Company production of *Summerfolk*, which won an award when produced in New York in 1975.

The chief engineer, played by John Seitz in white suit and Ascot, manages to disrupt the claustrophobic serenity of the unnamed town by dint of sheer exuberance, quite apart from his job to bring the railway through. John Polito, who has become typecast in hard-hearted roles, plags a professional colleague with a determined meanness that contrasts well with the town's superficial civility but makes him less believable in his obligatory third act romance.

These interlopers do well in the heightened colours and spirit of Jones' direction and Andrew Jackness's set. But the gossipy triviality of the townspeople wilts in the glare. Each character has a trait that he comes to embody with all the subtedely of a television commercial. A cast of 23 fills the stage with these provincial, shallow, starry-eyed non-entities for whom railway, Gorky has us believe, means little more than another subject to titter about.

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When jobs are over-priced

THIS RISE in unemployment to a post-war April peak is sadly predictable, and on present trends is only the first of a series of records which could stretch out for many months to come. The combined effects of lagging productivity, runaway wage increases and a strong pound could have no other result. What is just as predictable is that this result should provoke attacks on the policies which are thought to have produced it. The Government, which has shown some single-mindedness in imposing these policies, is now facing its real test.

Education

It is of course a gross over-simplification to say that monetary stringency has led to unemployment. As the Governor of the Bank of England reminded the House of Commons Treasury Committee on Monday, in a slightly different context, it takes two to tango. If wage bargainers had taken due note of monetary policy and its implications, especially for exchange rates, the outcome would have been very different. An initial cut in real wages would have led in due course to lower interest rates—themselves a considerable burden on living standards—as well as lower prices and greater competitiveness. The previous cycle showed that the virtuous circle set up by falling inflation stimulates activity and quickly restores real income. High unemployment, in other words, is the price of what is so far proving an expensive education in the realities of free wage bargaining under monetary constraint.

Explosion

Those who argue that there is some other course open have to face two unpalatable facts. The first is that the very behaviour which has made monetary targets so restrictive in real terms is equally a guarantee that any relaxation of monetary discipline would result in higher inflation, not higher real activity. Trade unions press for every available penny, and can be persuaded to remember the long-term implications of vanishing profit margins only in concerns whose survival appears to be at risk. Simply making more money available would actually make matters worse.

Those who understand this dilemma argue instead for an incomes policy—yet another attempt to impose rational behaviour from the centre, in the face of all our past experience. This would indeed provide some help for as long as it lasted; but the subsequent explosion would no doubt wipe out all the benefit and more. Many of our present problems—notably the huge awards in the public sector—are due to the distortion and collapse of the last attempt at incomes policy.

This may be read as the logic of despair, but as the Governor reminded his hearers in the House of Commons, despair can easily be overdone. Some parts of industry seem able to compete despite the general pressures, which simply means that they are achieving an international rather than a British standard of efficiency. In some respects, too, the rise in unemployment is itself a healthy symptom. The sharp rise in redundancies—far more marked than in earlier recessions—is in some cases the result of a failure to compete, but in others the result of a determination to become competitive. When industry is overmanned, it is difficult to achieve an improvement without redundancies: in a depressed world and domestic market, it is near impossible.

Balance

However, there is a much less healthy side to the picture. Manufacturing industry has been driven by competition to settle for lower than average wage increases as well as redundancies; but the higher settlements being seen in the public sector and in some services not only attract labour, but impose a burden on manufacturing through higher interest rates and charges. The Governor has conceded that he is "sad" at the likely prospect of very high settlements in the banks. The Government has still to find a way of making monetary pressures, which promise long-term good as well as immediate suffering, apply more generally across the economy, through tighter control of the public sector's costs, lower borrowing, and more effective competition policy. But these are the steps needed to make the present policy more effective, not to change it. There remains no other practical course.

Unease in India

THE unrealistically high growth rate that Mrs. Gandhi announced on Monday would be India's target for the next five years will only confirm the unease in India about the lack of direction under her new administration. National output fell during fiscal 1979-80. On coming to power in January Mrs. Gandhi sharply criticised the economic legacy she had inherited from the outgoing Janata administration. The new planning commission has only just been appointed and Mrs. Gandhi was addressing its first meeting on Monday when she apparently pulled out of the air an annual growth target for the next five years of 5 per cent or possibly more—higher than India's historic rate and higher than the target set by the Janata Government.

Juggling

There was no explanation of how this was to be achieved. But rather like Mrs. Gandhi's recent nationalisation of six of India's private banks the new goal smacks of a political juggling designed to achieve short-term popular gain without much concern of how to meet in the long run the popular expectations that have been aroused.

During her previous Premiership Mrs. Gandhi was prone to substitute eye-catching slogans such as *garibi hatao* (remove poverty) for well conceived measures. In many ways her domestic problems are far greater than she had anticipated when she returned to office. Assam and the north east are in a state of simmering insurgency; price rises which were temporarily slowed after she came back to power are now moving ahead at an annual rate of 23 per cent; power shortages have brought key industries in the south to a halt; caste violence and industrial unrest remain widespread, and last year's drought is taking its inevitable toll in food shortages in the north.

Cabinet

The continuing deterioration is by no means Mrs. Gandhi's fault alone. But she has certainly failed to inject any sense of urgency in decision taking whether it be in giving the go-ahead for new private investment or in trying to eliminate the more glaring infrastructural bottlenecks. It is this feeling of drift, of allowing problems to pile up, that is worrying an increasingly wide spectrum of businessmen and officials.

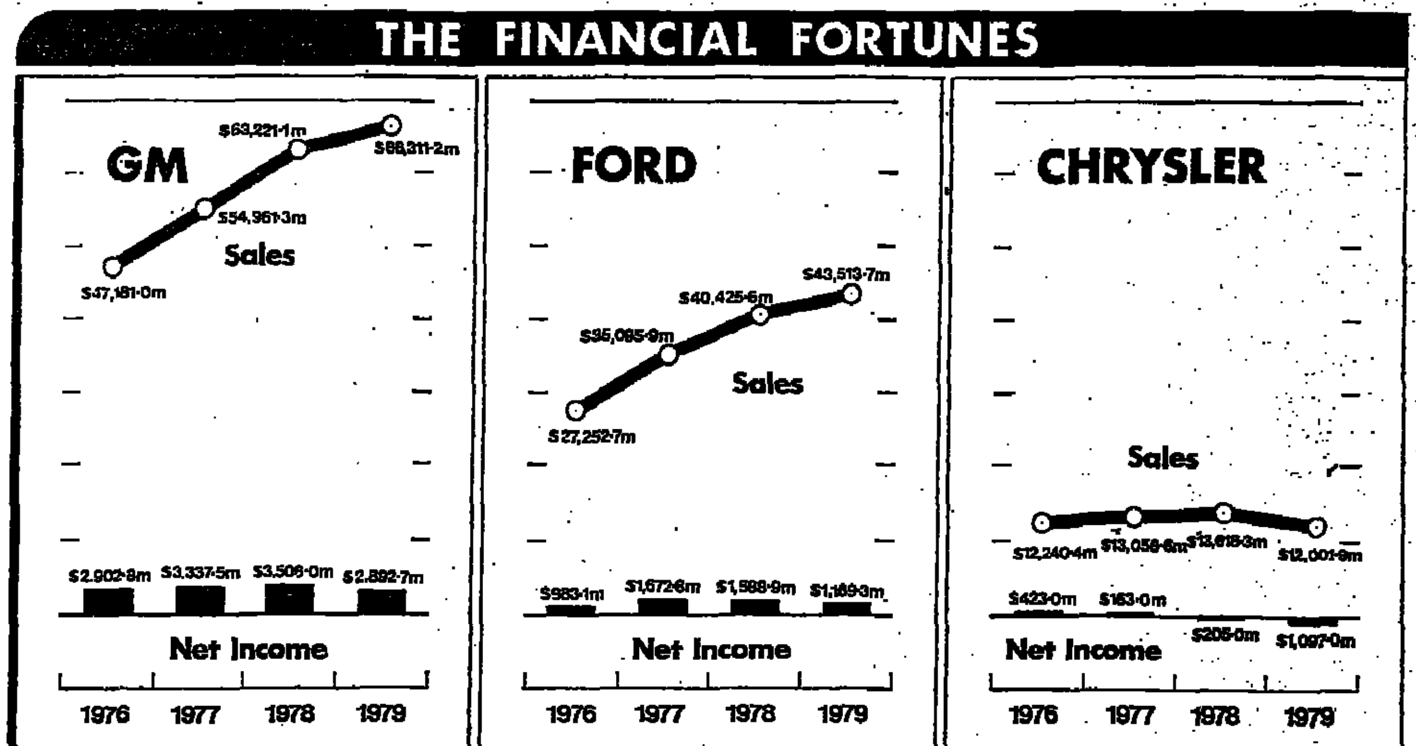
A further worrying factor is that Mrs. Gandhi seems as unable as she was in the past to tolerate advisers around her of stature or of independence of view—thus depriving her Administration of an additional perspective that is much needed in so diverse a country. She has still to fill five important Cabinet posts. But so far personal loyalty has been the main criterion of key appointments and seems increasingly to be felt to be the criterion of advancement in the civil service. The judiciary, which was ready to challenge her during the Emergency, now seems to have lost some of its independence. In this vacuum, her son Sanjay occupies a position of increasing prominence as her most trusted adviser but with unknown powers. This is another cause for concern.

It is arguable that Mrs. Gandhi is biding her time before tackling major economic and domestic problems until she has got the State elections out the way. These are due in nine States at the end of next month and should result in Mrs. Gandhi consolidating her grip on key State administrations. Continuing unrest enforces her argument for the need for strong government.

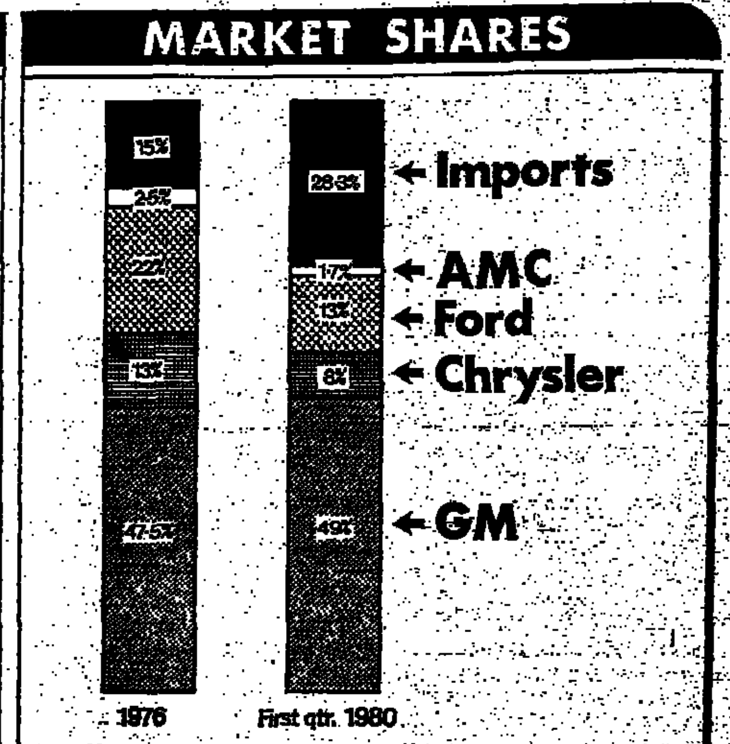
Discipline

With the additional power she should then have she will be in a more impregnable position to take whatever tough measures she might think necessary. But discipline enforced through the type of iron glove she displayed during the Emergency will not ensure the image of a united India that Mrs. Gandhi wants to project abroad. The basis of the strong foreign policy to which she aspires must be confidence at home in the way her Administration tackles the difficult economic and social challenges ahead.

THE FINANCIAL FORTUNES



MARKET SHARES



Where Detroit got it wrong

BY IAN HARGREAVES IN NEW YORK

THIS week, three employees of the Foremost Insurance Group of Grand Rapids, Michigan, bought new cars.

One of the inducements for them to do so was a $200 contribution towards the cost of each vehicle made by the company on one condition—that the new cars should be made in America.

This was good publicity for Foremost, which in a country which prefers high wages to perks, promptly claimed a "first." The move was also presented as a straightforward piece of flag waving for Michigan's and America's most important manufacturing industry, an industry which contributes one-sixth of the country's gross national product. Moreover, it is an industry which some people, other than those with a vested interest in its prosperity, are beginning to argue shows signs of permanent dislocation rather than mere cyvlical depression at the hands of Japanese competition.

Noting that this year the Detroit motor manufacturers would well surrender almost a third of the U.S. market to imports, a recent cover story for Business Week concluded: "What may be at stake is Detroit itself—at least in its present form."

A few days later the motor analyst team at Merrill Lynch, New York's biggest securities firm, commented drilly that the appearance of such an apocalpytic article in such a prestigious publication would normally be the right time to think about buying motor stocks. But in this case, Merrill withheld its "buy" signal and a good job too, because a few days later Ford announced plans to shut four plants and shed 1,500 people, causing Merrill to conclude that Ford will probably clock up a worldwide loss of $300m this year, against a $1.2bn profit last year.

Early this week Ford's share price was trading in New York at its lowest point since 1959. It was also lower, without taking account of inflation but allowing for the effects of stock splits, than the day when the Ford family first offered the public a chance to buy Ford Motor shares in 1956.

For the car makers, the picture is as grim as it could be. Over 200,000 hourly paid people are indefinitely laid off—more than a quarter of the industry's workforce. In the city of Detroit, the unemployment rate is pushing towards 15 per cent (against the national figure of 6.2 per cent). And the Labour Department fund used to pay workers put out of a job by imports is about to run out of money, mainly because of the cost of paying displaced car workers.

The history of what went wrong is a painfully worn theme for Detroit, but that did not stop President Carter re-iterating it at his Press conference last week. He recalled the day in 1977 when he had sat in the Cabinet Room with the top executives of the industry and beseeched them to build smaller cars "to help the country save energy." Their unanimous reply was that this was an inappropriate thing for them to do—that "the market was not there for the small and efficient automobiles."

But in the year to April 10, 51 per cent of all the cars Detroit sold were in the compact and subcompact classes (a year ago the share was 42 per cent). Imports which are almost entirely subcompacts, took over 26 per cent of the U.S. car market in the first quarter of this year. A typical subcompact, by the American definition, would be a Ford Fiesta, and a compact is the European size-range above this.

This miscalculation about the cost of petrol and its effects upon the American public's taste in cars—a change stimulated early on by tough federal standards on improving fuel efficiency — was what sent Detroit plunging into recession last September when the rest of the U.S. economy was still kicking strongly, if with inflationary consequences. The inflation drove up interest rates, which caused major problems for car dealers and would-be buyers as well as for the motor companies, which are staggering under the burden of a more than $12bn a year capital investment budget, needed to rip out the old production lines and replace them with machinery to produce cars the public is prepared to buy.

The worry is the familiar one of cyclical recession, which is already driving down real personal disposable incomes and which Ford now expects will cut total retail car sales this year to 9.9m units, 7 per cent lower than last year. The forecast looks optimistic, but assuming it to be accurate, it means that after allowing for imports, the four U.S. companies will be fighting over a market of around 7m cars, compared with the 8.2m they sold last year or the 9.3m the year before.

In the motor industry lower volume means lower profits, as Detroit has amply demonstrated in the last six months. Chrysler, the third largest company, has been financially crippled, losing $1.1bn last year and ending the year with negative working capital and is now dependent upon the graces of the Government for its survival. Ford, the number two company, lost money in the final quarter of last year, will lose a lot more in the first half of this year and would be losing even more but for its profitable non-motor operations and its successful motor subsidiaries outside North America. It saw its working capital drop from $3.1bn to $2.3bn last year and has as a result seen its credit rating cut this year, a development which means it will have to pay more for the money it borrows to finance its re-tooling.

General Motors remains the industry's Titan, holding its market share because it does have one successful small car line, and its problems are cyclical rather than structural at this stage. Even so GM will probably not be able, as is its custom, to meet its capital spending bill without recourse to outside funds this year. As a result, there are fears of a cut in what is normally considered one of the most reliable dividends in corporate America.

It is already evident that the industry's production rate in the next three months will be slightly below that of the same period in 1975—the year of the industry's last slump. Indeed output looks certain to strike a 17-year low, which makes this a very severe recession indeed even without further blows.

But that does not mean the end of Detroit as we know it, however much it may feel that way to the lines of people outside the welfare agencies in that city.

The conclusion that irreversible changes have occurred is based first on an impression and second on an analysis.

The impression is that Americans cars are no longer as good as Japanese cars (which account for over three-quarters of the imports). The radio chat shows and the local paper letters columns disgorge a stream of disgruntled customers' comments about the inferior treatment of warranty claims by U.S. manufacturers compared with the Japanese firms' dealers. The Japanese product is said to be more reliable, the range more varied and the performance superior. This self flagellation, which goes hand in glove with associated comments about declining U.S. labour productivity (which is a fact rather than a feeling) is gruesomely familiar to British ears.

The analysis is that although in the 1981 model year, which starts in October, the U.S. manufacturers will be producing 3m units of smaller front wheel drive cars, this will not be enough to prevent another bonanza year for the importers—even if, and it could be a big if, the Public likes Detroit's new products as much as it likes the foreign cars. By 1985, at the end of one of the biggest capital investment efforst in peace time by any U.S. industry, only 40 per cent of the engine capacity of the U.S. companies will be the smaller four cylinder type. Even allowing for some imports from engine plants in South America and elsewhere, this indicates the period during which Detroit will be struggling to fill its small car gap. It also indicates the huge scale of the plant owned b ythe U.S. companies which is now rapidly passing into obsolescence. IWthout doubt the three assembly plant closures announced so far this year (two Ford, one Chrysler) will be added to in the next two years. And if the economy does not turn sharply upwards by the middle of next year (the most pessimistic assumption in Detroit) the financial pressures could become verey severe indeed.

A bigger problem is that Detroit has to learn how to make money from small cars. As recently as last autumn Mr. Lee Iacocca, chairman of Chrysler, was telling Congress that this was impossible, or at least that margins would be too slender to support the overheads of a major U.S. company engeded in a large spending programme. Now Mr. Iacocca is apparently erady to make Chrysler the first "European style2" motor manufacturer, with just two basic model ranges, both of them small vehicles.

The comparison with Europe is one being studied hard by Detroit. Ford knows it at first hand and it is no accident that the men recently shuffled to the top of Ford's executive tree all have experience of running Ford Europe. GM is less well placed in this respect, although now rapidly expanding overseas. For Chrysler, if it can survive, there is the hope of a growing relationship with Peugeot-Citroen. For American Motors there is its proposed joint assembly plans with Renault, and Volkswagen the prospect of expanding its U.S. base and broadening its attack on the market.

There have been other European type developments too. Chrysler now has a labour union boss on its board and some feel the company is drifting towards state ownership to stave off bankruptcy. The U.S. Government is becoming more preoccupied with helping its motor companies than with attacking through the anti-trust laws their growth into potential monopolies. There is an inclination in more and more quarters to think of some form of protectionism.

From the European point of view, the assumption is that Renault, Peugeot-Citroen and Volkswagen have nothing to lose by pursuing their U.S. ambitions. Whatever the problems of U.S. labour costs compared with those of Japan, there is no significant differential with Europe; the U.S. continues to offer the largest and most sophisticated car buying public in the world and so far at least the investment by European companies has not been enormous.

These perceptions, however, will change if Detroit does succeed in matching the foreigners' small cars in price, quantity and quality (only the last point is in doubt). Then it will be a question of which manufacturer builds small cars most efficiently and most cheaply: the much discussed battle for supremacy in the "world car."

It is too early to tell who will come to the top in that struggle. But, if one accepts the argument that only the biggest will survive, the leading contenders look like being Ford, General Motors, Toyota, Nissan and the Euro-American companies still in the process of formation—Volkswagen-VW of America, Peugeot-Chrysler and Renault-American Motors.

Detroit may not be finding much pleasure in the education it is receiving about fuel economy in cars, but if it can bear the pain of the beating it looks like suffering in the home market in the next two or three years, the two leading companies at least should emerge as stronger contenders as a result.

MEN AND MATTERS

Delving in the DoT dustbin

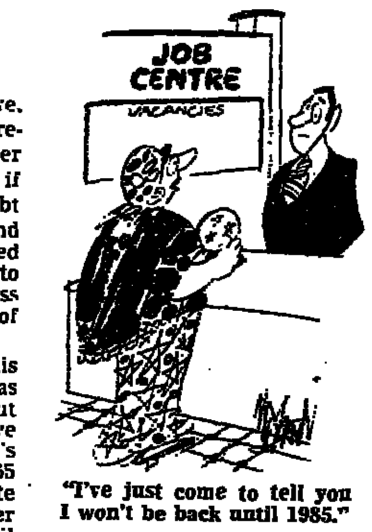
As jumble sales regularly prove, there is always someone prepared to give a home to other people's junk. Further proof, if it were needed, comes from debt collectors to the world, Dun and Bradstreet, which has launched a short, sharp campaign to rescue the Registry of Business Names from the dustbins of the Department of Trade.

As I revealed earlier this month, the Government has decided that it can do without the 2.5m index cards which have accumulated in the registry's files since 1916, and that the 65 staff who tend this white elephant will be better employed elsewhere in the Civil Service. Dun and Bradstreet, however, the 139-year-old U.S. based "business information" company with a strong sense of history and a daily need for the facts stored in the registry, wants it saved and taken over by a consortium of companies and trade associations.

"People like the Law Society and credit reference agencies like ourselves find it invaluable," says public affairs officer John Dawson, who has until June 30 to rally support. Proof of its value, he claims, stems from the records which show that 130,000 to 140,000 new names are registered yearly, 30,000 changes are made and 180,000 visitors call in for information and willingly pay the search fee of 5p which has been unchanged since 1916. His own company makes up to 40,000 searches a year in the files.

"Without the RBN," he tells me, "it would be extremely difficult to ascertain the real owners of a business. It would be much easier, for example, for disreputable businessmen to mislead their creditors and others by providing false information. This could bring a serious element of doubt into business dealings at a time when business risks are already on the increase."

The commercial world may do well to pay heed. Dun and Bradstreet has a reputation for perspicacity: in 1972, for instance, it warned with pinpoint accuracy that British Leyland would find itself in bad trouble some time after 1974 and would eventually have to join forces with a Japanese company.



"I've just come to tell you I won't be back until 1985."

First move

"It might be worth a slight increase in salary to keep me here so we can win some more," said Len Jolley. "But I doubt it." Basking briefly in the office spotlight yesterday, Jolly was reflecting on his victory in a crucial match on Monday night which enabled his employers, Simon and Coates, to carry off the Stock Exchange chess trophy. With five zoards drawn, his win over Michael Brookes scooped the prize from under the nose of favourite firm Phillips and Drew.

Winning captain Eric Leynes now takes possession of the Castello Parsons Trophy which has not left the offices of Grieveson, Grant since the annual journey was started five years ago. It should strike a nicely cerebral contrast in his firm's display case which to date has been filled with cups from victories in the less gentle art of football.

Fidelity's reward

Len Murray and other big wheels in the union movement may care to reflect for a moment on the benefits which can stem from intimate relations with government. A prime example is provided by Mexico's veteran trade union leader Fidel Velasquez. Eighty tomorrow, he will today be re-elected head of the Mexican Confederation of Workers for his eighth successive six-year term.

Don Fidel, as he is respectfully known, has ruled Mexico's union movement virtually unchallenged for more than 40 years and says he has every intention of staying put until he dies.

In the Byzantine world of Mexican politics, holders of high office come and go every six years and are not allowed to stand for re-election. But Don Fidel has survived seven presidents and shows every sign of carrying on under the next one.

The key to his remarkable election record seems to lie with ... knack of getting on the right side of political leaders. in 1976, for example, h called on his massive following to supoprt the presidential candidacy of Jose Lopez Portillo. Duly grateful, President Lopez is now reciprocating with staunch support for the re-election of the durable Velasquez, who, no doubt, will shortly be looking for a new back to scratch in time for the next presidential poll in 1982.

Disney rival

"If you cannot make something work on half a million quid," Lew Cartier once said, "then the chances are that it's not going to work at all." A forgiveable exercise in hyperbole, I suppose, coming from the man who started selling meat from a van 11 years ago with £500 and last year sold a chain of supermarkets to Tesco for almost £20m.

But the 34-year-old lad from Margate plans to find vastly more than £500,000 on his latest venture: omre like £200m to be exact. That is the projected cost of a graudiose "theme park" scheme Cartier will announce later this week. Far from his native beaches of Margate, the young entrepreneur is bent on establishing "Little England" on a 1,300-acre site in Florida.

According to documents filed with the Florida planning council, the first part of Little England will open in 1983 and wil pander to the Americans' insatiable hunger for things historic. Although the main attractions will have a medieval character, Cartier seems intent on painting his picture of Olde Englande with a broad brush. Prominent among the castles and jousting displays will be Stonehenge (it has been around for some time, after all), 500 modern luxury homes, shops specialising in all things English, and a golf course.

Sole suppliers

So far behind the rest of the world in most fields, I am happy to report that the Chinese are one step ahead in the area of insecticidal, fungicidal and pharmacological footwear. Yesterday's Canton Daily boasts that so far this year the People's Republic has exported more than 40,000 pairs of special shoes.

A perfumed, herb-based powder is laminated into the soles, the paper say, "which protects against insects and moul and stops feet sweating. If worn for long periods, they are also useful in curing beriberi."

Down to earth

Spotted on the wall of a men's washroom in a Coventry factory: "Shop stewards are requested not to walk on the water."

هكذا من الأصل

AS UNEMPLOYMENT REACHES A POST-WAR PEAK, PETER RIDDELL REPORTS ON THE EFFECTS OF THE TREASURY'S POLICIES

Monetarism: inflation slow to respond

SO FAR, the Government's attempt to cut the inflation rate through a tight monetary squeeze is not working according to plan. Admittedly, it was never expected to be painless or to produce rapid results. But to date the level of wage increases has accelerated, not slackened, and the 12-month rate of increase of retail prices has doubled to nearly 20 per cent.

Some of the upsurge can be blamed on the policies of the last Government. The sharp increase in oil and other commodity prices is also part of the explanation. But this is not the whole story, nor is it any help in trying to lower inflationary expectations ahead of the next pay round. Indeed, the big unions are already talking about next winter's claims at their annual conferences which are now starting.

This accounts for the series of nervous Ministerial statements over the last week. The money supply may at last appear to be coming under control but the headline news from the official prices and earnings statistics is still bad and is likely to get worse for at least a few more months.

Critics of the Government are therefore not short of facts and figures on which to base the argument that "monetarism" has failed and that something else (generally an incomes policy) should be tried.

If by "monetarism" is meant the belief that the rate of growth of the money supply—cash and bank deposits—is a crucial influence on the rate of inflation in the medium-term, then the epitaphs are premature.

There is little doubt, however, that the Government had a bad start, partly because of the legacy from Labour and partly because of its own actions in the June, 1979 Budget. The single-figure rate of retail price inflation between early 1978 and spring 1979 always looked slightly artificial.

The Labour pay policy had started to break down in the private sector during the 1977-1978 winter. This was a foretaste of what was to happen in the public sector during the following "winter of discontent." The coincidence of strong economic activity and the Iranian revolution led to a very rapid rise in oil and other commodity prices.

The single-figure rate of inflation . . . looked slightly artificial

Thus by election time in May the pressures on inflation were strongly upwards. This was not fully apparent then, partly because of the delay before cost increases worked through to the indicator was still, just, in singl indicator of inflation, the 12-month rate of increase in retail prices, was still, just, in single figures. Moreover, there was the usual pre-election tendency for increases in public sector prices and charges to be deferred or held down. As a final twist Labour had bought off some of the winter strikes and disputes in the public sector by the creation of the Clegg Comparability Commission.

The new Tory Government immediately added to the pressures with its bold, most would say reckless, switch from direct to indirect taxation. "At a stroke" this added nearly 4 per cent to the retail prices index.

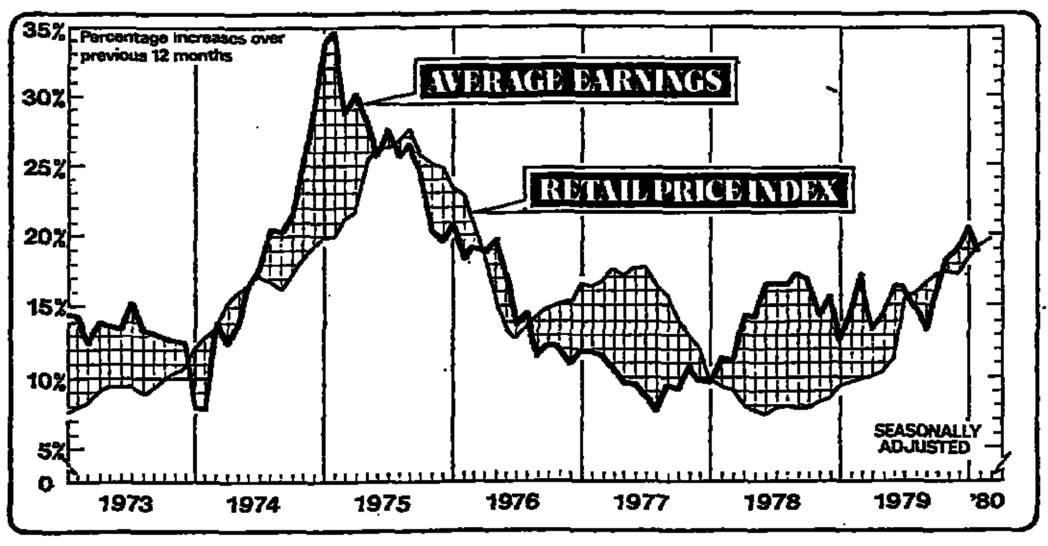
At a time of leapfrogging oil price increases economic forecasters were then able to predict corrctly that the 12-month rate of retail price inflation was likely to accelerate into the upper-teens by the end of 1979 and up to 20 per cent by spring 1980. These forecasts were quickly translated into pay claims of well over 20 per cent.

The critics of the Treasury team, of which there is no shortage inside as well as outside Whitehall, argue that all this shows the irrelevance of relying on a monetary squeeze to influence pay bargaining. The impact of the actual or expected rate of price rises is, they say, more powerful. This mistakes the role of monetary policy

For monetary policy has had an influence, even though it has so far been a patchy and uneven one.

The direct impact of a monetary squeeze is to raise domestic interest rates relative to those abroad. Last year the pound was anyway becoming a "petro-currency" at a time of rising oil prices and increasing North Sea oil production, so the additional attraction of high relative UK interest rates fuelled the demand for sterling. The consequent rise in the exchange rate of the pound reduced the cost of imported materials to British companies.

The indirect impact of a tight monetary squeeze is less clear-cut and more controversial. A rise in the sterling exchange rate not only reduces the relative cost of imported raw materials but it also cuts the prices of imported manufactured goods and increases the prices of British exports compared with goods produced overseas. The theory is that this competitive pressure on prices and profit margins will force companies to be tougher



in resisting big pay claims.

The snag is that only part of the economy is exposed to international competitive pressure in this way. The public sector and much of the service and distribution sectors are not directly subject to these disciplines. Many have the additional advantage of being monopolies and are able to pass on higher costs to their customers.

The monetary squeeze and the strength of sterling are undoubtedly having an impact on manufacturing.

This is supported by the results o fthe Confederation of British Industry's monitoring of manufacturing settlements although the size of increases has varied between 1.5 and 29.2 per cent. The latest survey, out last week, showed that an increasing proportion of companies were mentioning the level of profits as a "very important" downward pressure on the level of settlements.

Overall, the CBI survey indicated that half of manufacturing settlements since last summer have provided for pay rises of 15 per cent or less. This compares with the disclosure last week by Sir Geoffrey Howe, the Chancellor, that the average level of private sector settlements since the summer had been 18.5 per cent.

The difference can be expexplained by what has been happening in the non-manufacturing part of the private sector. The pressures from a strong pound are much less there and the consumer boom has boosted profits. There have been some very large pay rises in the financial sector which has so far been more a beneficiary than a victim of high interest rates.

The position is more complicated in the public sector. Many of the pay deals last year have been implemented in stages, as have the awards of the Clegg Commission. This has meant that there has been a delayed impact on the earnings received and on the public sector's pay bill. This led to some confusion last week when the Chancellor and his officials told the cash rekuired to finance central Government pay would rise by a quarter between 1979-80 and 1980-81.

Sir Geoffrey subsequently explained that a third of this increase in the expected central Government pay bill represented the full year cost of the later stages of catching-up settlements in the last pay round. He stressed that only 14 per cent more was being provided for new pay settlements in the current round and that the deals so far were consistent with this limit.

But however much can be explained away in the public sector, the overall impression is still damaging to the Government's counter-inflation strategy. After all, some people in monopoly nationalised industries will be receiving 40 per cent more in their pay packets than a year ago and others in private manufacturing will be receiving less than a tenth more, hardly the best way of attracting skilled engineers.

The end result is that the average growth of earnings in the current pay round looks like being over 20 per cent. But comfort can be drawn from the limited amount of leapfrogging in the level of wage increases during the round. Moreover, the CBI survey showed that a third of settlements so far contain elements designed to raise productivity. If genuine, these should help to hold down unit costs and to improve competitiveness. Nevertheless, given both these pay rises and the pressures from higher oil and raw material costs, the 12-month rate of increase of retail prices is likely to climb from the present 19.8 per cent to between 22 and 2 per cent by the mid-summer.

For purely statistical reasons the 12-month rate is likely to show a decline when the mid-July index is published in August. This is because the rise in prices caused by last June's Budget will drop out of the 12-month comparison then. The underlying rate of increase—currently at least 16½ per cent—may still continue to rise for a few months.

Yet there are several straws to clutch at: we may not be condemned ot a repetition of the 1974-75 pay and prices explosion. First, once the hump of public sector catching-up is out of the way the pressures from higher Government pay could fall, provided the cash limits stick. Second, the squeeze on manufacturing industry is likely to intensify rather than to decrease as the recession deepens and unemployment rises even higher than the new post-war peak announced yesterday. Third, there are already signs of an easing in world commodity prices, notably metals.

These factors coupled with a tighter and more explicit monetary squeeze than in the mid-1970s could mean that the worst is almost over. This is certainly the view of most academic and City economists. They believe that both the 12-month and underlying rates of inflation will decline after the autumn, though the Government's public spending plans imply continuing large increases in public sector charges and prices.

There is much less agreement about the pace of any slowdown in 1981 and 1982. The publication of Government monetary targets for each year up to 1983-84 in the new medium-term financial strategy indicates the direction of Government policy.

The view of most economists — even of r. Wynne Godley's gloomsters from Cambridge — is that present policies will cutting of the inflation rate. the cutting of the inflation rate. But the "success" may only be relative to earlier fears since the 12-month rate could still be in the low-teens in 1982. Moreover, the Government's critics argue that this would be at the cost of sluggish output, much higher unemployment and a smaller manufacturing base. The Government's view, as strongly expressed to the Treasury Committee by Mr. Gordon Richardson, the Governor of the Bank, on Monday is that only by lowering inflation through monetary restraint is there any hope of a recovery in output and jobs. The "monetarist" approach is thus still very much on trial—with not that many supporters but plenty of sceptics.

Letters to the Editor

Soviet oil production

From Dr. D. Wilson

Sir,—Mr. Walbeoffe-Wilson's opinion (April 16) on the future of the Soviet oil industry joins a long lis tof other forecasts in similar vein, all of which have proved wrong. Observers have been predicting the imminent peaking of Soviet oil production for the last 20 years, and yet it still continues to grow.

Perhaps he has read the thoroughly-discredited CIA report on Soviet oil which was published in 1977, and which based its forecasts on the belief that output from Western Siberia would peak at 5.2m barrels a day. In February 1980, it reached a record 5.9m b/d and has been growing very rapidly during the last six months. With the commissioning of the world's largest pipeline later this year, Siberian output should hit the 6.3m b/d mark by the end of this year.

There is no evidence that Soviet oil production will peak in 1981, still less that it will decline by 10 per cent a year thereafter. On the contrary, it will continue to grow, albeit at slower rates, to 14m b/d by 1985 and 15m b/d in 1990. The CIA has already back-tracked to the tune of several hundred million tons a year by 1985, and has implicitly acknowledged that it was hopelessly wrong.

(Dr.) David Wilson.
(Lecturer in Soviet Geography.)
Leeds University,
Leeds 2.

Local authority pay

From the General Secretary, National and Local Government Officers' Association

Sir,—While Mr. Murphy (April 17) may hope to earn £12,500 by next July, most of his fellow local government officers will not be so lucky. The average wage is now £4,850 which includes the increases negotiated last July of 9.4 per cent, and a further 13 per cent, the average comparability payment, from January.

It is certainly a new departure to take increases not yet agreed to calculate the percentage over a given period. Mr. Murphy seems to pluck figures out of the air to suit himself. Take a long enough period and you could justify any figure. Perhaps Mr. Murphy has some kind of crystal ball and knows the outcome of this year's wage claim without it even having been submitted.

There are many points on which we must take issue with Mr. Murphy. He seems to accept without question the falacious arguments that are at present masquerading as economic writ. A sustained increase in public expenditure is essential to provide a basis for renewed economic growth and a reduction in unemployment. Treasury estimates show clearly that an increase in public spending of £1bn generates nearly six times as much employment after a year as a similar amount released in tax cuts. An expansion of the public sector is the only way for Britain to reverse its economic decline and create conditions for growth. In a buoyant economy there would be no question of someone having to pick up the price-tag, or of Mr. Murphy being locked into local government.

The comparability study to which Mr. Murphy refers and which produced, on average, increases of 13 per cent was not "phoney." It was based clearly on the comparison of wages in local government with those in private industry. No matter what Mr. Murphy may think, there is no innate virtue in artificially depressing local government wages. Or is he suggesting that our public services should be run to subsidise private industry?

Geoffrey Drain.
National and Local Government Officers' Association,
1, Mabledon Place, WC1.

Depressed by a 42% increase

From Mr. H. Thornton

Sir,—Your local government correspondent from Stockport, Mr. Murphy (April 17), should not be too worried at becoming 42 per cent better off over a 12-month period. He will find out that the 42 per cent will have to last him until June 30, 1981, by which time his wife may be pressing him for a little more for the housekeeping.

Mr. Murphy should also console himself with the thought that his comparability rise was to compensate him for his losses over a three-year period of pay policy which was strictly applied in local government and may not have been too well applied elsewhere. It is quite likely that by 1984, or sooner, we shall have another pay policy in which Mr. Murphy and his fellow public servants can be expected to suffer, as all good public servants should.

In my 40 years in local government, I have always suspected that we were the most admirable public servants of all. Have we ever seen a letter in your paper from a repentant civil servant, coal miner, teacher, or policeman, about the levels of their pay increases, which, in my experience, have inevitably been somewhat higher than the amount payable to a public relations officer at Stockport.

H. Thornton.
133 Oxford Road,
Middlesbrough, Cleveland.

Nuclear power

From Mr. R. Mitchell

Sir,—I applaud your publication (April 15) of Sir Alan Cottrell's article. He has not glossed over the difficulties and disappointments of the present advance gas-cooled reactor power stations but has pointed out the future benefits to be gained fro mexperience in their design and construction.

While I support AGR's on safety grounds, financially it also appears that the potential arising from improvement in AGR design is greater than that associated with the pressurised water reactor (as this has already had the benefits of experience arising from a much longer construction programme).

R. G. Mitchell,
45, Knighton Drive,
Woodford Green,
Essex.

Imports of leather

From the Joint Managing Director, Spartan Luggage Co.

Sir,—I have read the letter from Mr. Arthur O. Lyman (April 19, with very great interest, as, being in the same industry, I agree one hundred per cent with what he has said.

I feel however, that he has not explained sufficiently the extent of the damage being done to British industry as a whole. The leather industry, which includes the shoe trade, the luggage trade, the small leathergoods trade, the handbaks trade, and part of the clothing trade, did employ large numbers of people in actual manufacturing, but, in addition, the leather trade itself supported a large number of workers in other industries. Therefore the damage being done to the leather industry by unfair competition referred to by Mr. Lyman is not confined to the members of the leather industry and the various leather users' industries, but actually hits at all parts of British industry.

I personally know ten to twenty experts in this industry, on the manufacturing side, who have realised that they cannot possibly survive as manufacturers in this present climate, and have now turned their expertise to importation, from subsidised overseas markets, of those very goods which are helping to kill the rest of the small percentage of this industry which still remains. I m now being forced to believe that we are fast coming to the stage where there will be the complete decline and collapse of these industries in Britain, and, as Mr. Lyman mentioned, when the oil runs out, or the price falls, there will be no recovery.

H. F. Palmer.
Spartan Luggage Co.,
Rilway Works,
Pensbury Place,
Wandsworth Road, EW8.

In place of war

From Mr. J. Hobbs

Sir,—The Olympic Games were instituted so that tensions between rivals could be worked off and relieved on the playing fields rather than on the battle grounds. Were the ancients wiser than we today?

John H. Hobbs.
26, Boulevard des Moulins,
MC Monte-Carlo.

The levels of fair rents

From Mr. R. Jensen

Sir,—Mr. Kitzinger (April 17) recommends a further dose of "reverse Rachmanism" which would do credit to a spokesman for any of the innumerable housing/tenant pressure groups. The hundreds of thousands of would-be tenants who are denied access to privately rented accommodation at rents mutually acceptable to tenant and landlord alike must feel eternally ungrateful that such myopic perception is the foundation for much which has been embodied in successive Rent Acts. Equally ungrateful should be those of us who subsidise, but do not personally benefit from, the alternative public sector provisioning of new building adding an extras £60 weekly per dwelling to the housing revenue account for renting out at less than £10 weekly. I would contend that it is maintenance of parity with these levels of rent, rather than any notion of fairness to the private landlord, that is the prime determinant of "fair" rents and, as such, is contrary to both the letter and the spirit of the fair rent concept.

Mr. Kitzinger's first improvement to the fair rent concept would be to index the repairs and maintenance element, restoring the remainder to some pre-1973 level. The fraction of rent implicitly attributable to repairs and maintenance is about one-quarter of the total figure. The remaining three-quarters, by Mr. Kitzinger's standard of fairness, would be left to erode at the going rate (being halved every four years at the current rate). But why does he ask for so little? Why not revert to 1957 rent levels which is all that the landlords of some 300,000 rent-controlled properties still receive today?

The second improvement, according to Mr. Kitzinger, is that any change to the present triennial rent review should be such as to extend this review period. Perhaps he has in mind a repeat of the situation whereby, some time into the 1990s, following decontrol under the 1980 Housing Act, the rent officer service and rent assessment committees might just be completing the first rent review since 1957 of such of those 300,000 properties which have not by then died from rent staration. The fatuous observation that a reduction in the present three-year review interval would "cause additional worry and work for tenants" is, I would suggest, patently untrue since no work is caused for the tenant (other than a brief appearance before the rent officer and, possibly, a rent assessment committee) and any upward adjustment will reflect little more than one-half of wage movements during the period to which the review relates. Mr. Kitzinger also deplores the extra workload which would be placed upon the rent officer service by a more frequent (than triennial) review. As just one counter-proposal, let me suggest that that service be dispensed with altogether at a very substantial saving, through the simple device of setting rents annually through direct application of a designated multiplier to the annual rate demand on the rented property; an appeals panel could, by exception, provide an outlet for airing any substantial grievance by either party. This would also sweep away the further discrimination ("phasing") whereby, having had a new "fair" rent fixed, the landlord is then forced to wait until the third year ahead before he is allowed to charge it.

The reference to year 1973 is presumably to the (August) 1974 Rent Act which extended rent regulation and the fair rent concept to furnished lettings (with correspondingly disastrous results). Thus, the only comparison that can be made against 1973 "fair" rents is for unfurnished lettings. Statistics for the London area show an increase of 77 per cent in the average "fair" rent between 1973 and 1979 (first three quarters), the corresponding figure for England and Wales being 86 per cent. Mr.s Kitzinger's figure of 200 per cent for his area is so far out of line with these figures that I am left to conclude that he is not comparing like with like. It is interesting to note that weekly wage rates rose by 153 per cent over the same 1973-1979 period (the RPI indicator by slightly less), thus demonstrating how rent officers and rent assessment committees consistently pervert the fair rent legislation by awarding only about one-half the amount needed even to stand still.

R. Jensen
11 Stanhope Gardens N4.

Today's Events

GENERAL

UK: Mr. Gordon Richardson, Governor of the Bank of England, speaks at Industrial Society conference on facts of British economy, Whitbread Centre, London.

Mr. Patrick Jenkin, Social Services Secretary, speaks at Croydon.

Dr. Rhodes Boyson, Education Parliamentary Secretary, speaks at Harrow.

Scottish Trades Union Congress meeting continues, Perth.

Amalgamated Union of Engineering Workers conference continues, Blackpool.

British Rail publishes annual report and accounts.

Royal Society of Health annual congress opens, Folkestone (until April 25).

Steel Castings Research and Trade Association conference opens, Harrogate (until April 25).

Sir Peter Gadsden, Lord Mayor of London, lunches with National Federation of Building Trades Employers, Fishmongers' Hall, EC4; dines with Leathersellers' Company, Leathersellers' Hall, EC3.

Overseas: EEC Agriculture Ministers meet in Brussels.

Greek presidential election.

PARLIAMENTARY BUSINESS

House of Commons: Employment Bill, remaining stages.

House of Lords: Debate on overseas sale of defence equipment. Debate on nuclear weapons. Concessionary Travel for Handicapped Persons Bill, second reading. Debate on time persons on remand are kept in prison.

Select Committees: Education (Room 6, 10.30 am); Scottish (Room 5, 10.30 am); Foreign Affairs (Room 15, 10.45 am); Industry and Trade (Room 16, 10.45 am); Public Accounts (Room 16, 4 pm); Transport (Room 8, 4.15 pm). Employment; Social Services (Room 15, 4.30 pm). Welsh (Room 18, 4.30 pm); Treasury and Civil Service (Room 21, 4.45 pm).

OFFICIAL STATISTICS

Construction — new orders (February). New vehicle registrations (March).

COMPANY MEETINGS

Anglia TV, Anglia House, Norwich, 2.30. Martin Ford, Winchester House, London Wall, EC, 12. Friedland Doggart, Midland Hotel, Peter Street, Manchester, 12. Huwood, Team Valley, Gateshead, 9.30. Molins, London Press Centre, Shoe Lane, EC, 12.15. Rea Brothers, 100 Old Broad Street, EC, 12. Sale Tilney, 28 Queen Anne's Gate, SW, 12. Squirrel Horn, Alma Lodge Hotel, Buxton Road, Stockport, 10.30.

TKM soars to over £16m and this year starts well

PROFITS, before tax, of Tozer Kemsley and Millbourn (Holdings) surged from £7.63m to a record £16.01m for 1979, on turnover of £1.11bn against £0.9bn. Mr. Kenneth Thorogood, the executive chairman, says the current year has started well and he expects the earnings level to be maintained.

	1979 £000	1978 £000
Turnover	1,107,000	900,000
Trading profit	13,230	6,251
Associates' share	2,783	1,381
Profit before tax	16,013	7,632
Taxation	6,140	1,725
Net profit	9,873	5,907
To minorities	643	†38
Earnings	9,230	5,945
Extraordinary debit	—	427
Attributable	9,230	5,518
Interim dividend	794	477
Proposed final	1,697	1,264

First-half profits had increased from £2.89m to £6.98m and the chairman then explained that the group was benefitting from the strong pound, as the proportion of profits derived from the sale of imported goods in the UK had outweighed that earned in foreign currencies overseas.

The group is involved in international finance and investment, transportion and the sale of forest products.

Yearly earnings per 20p share jumped from 11.9p to 18.1p and the dividend toital is raised to 4.77p (3.4909p) net with a final of 3.18p.

● comment

TKM has continued to build on its first-half success and full-year profits are more than doubled — an impressive performance considering it is almost entirely through organic growth. Although there is no breakdown, the company has clearly extracted the maximum mileage from the BMW franchise before it ended in December. Over the year unit sales were at least a quarter higher, thanks to the availability of higher stocks and, no doubt, to the voluntary restraint shown by Japanese car exporters in the UK market. Overall, the BMW business probably contributed about £7.5m which leaves a sizeable hole to be filed this year before growth can be resumed. However, GKN is optimistic that it can deliver based on the momentum from the other profit centres and the new acquisitions. This outlook is largely supported by the market where the shares edged 4p higher to 79p for a p/e of 4.1 on stated earnings. The yield is 9.1 per cent.

HIGHLIGHTS

Lex comments on yesterday's strength of sterling even against a firmer dollar and then moves on to the company front where **Liggett** stirred up the scene with news of proposals to sell part of its business to the French company Pernod—a part which **Grand Metropolitan** is particularly interested in. **Thomas Tilling** released its annual report yesterday which Lex analyses. **BL** also posted its annual report but shareholders are not provided with any fluctuation adjusted figures despite heavy replacement of assets. Lex comments on the cash flow of the motor giant where financing needs rose from £291m to £334m last year. Finally there are the annual accounts from the **British Transport Docks Board** where a 10 per cent decline in profits sets the scene for the planned launch of 49 per cent of the equity on to the stock market. On the inside pages electronics group **Unitech** pops up with a £3m rights issue and **Fairbairn Lawson** appoints a receiver, earlier plans to save the company having failed.

DIVIDENDS ANNOUNCED

	Current payment	Date of payment	Corresponding div.	Total for year	Total last year
Body cots Int.	2	July 1	1.58	4	3.03
Brown Boveri Kent	1.2	July 1	1.2	2.2	2.2
Chesterfield Props.	3	July 2	1.25*	5	4*
Dowding & Mills ...int.	0.7	June 4	0.59	—	1.5
EDITH	1.5	June 17	1.18*	2.3	1.91*
Farnell Elec.	2.7	July 1	1.92*	4	2.95*
Chas. Hill Bristol	nil	—	2	nil	2
J.B. Holdings	1.5	July 7	0.97	3	1.47
Lilleshall	2.5	June 6	1.25	3.5	1.93
M. Y. Dart ...int.	1	—	1	—	2.8
M. F. North	0.68	June 18	0.36*	0.8	0.47*
Oxley Printing	1.6	—	1.57	3.1	2.75
S. Pearson	6.25	June 2	4.99	10	7.99
Pearson Longman	4.61	June 2	3.68	8.36	6.68
Silentnight Hldgs.	2.03	—	1.60*	3	2.43*
Spencer Gears ...int.	0.35	July 3	0.25	—	0.9
Steel Bros. Hldgs.	4.85	July 3	4.4	8	7.15
Tozer Kemsley	3.18	June 12	2.54	4.77	3.49
Travis & Arnold	6	—	3.49	7.16	4.26
Utd. Carriers	3.5	—	1.95	5	2.93
Wadkin	4.22	May 24	4.22	6.47	6.47
Websters Group	1.4	May 30	0.91	2.1	1.5
Wilson Connolly	3.75	June 4	1.65	7.25	3.13

Dividends shown pence per share net except where otherwise stated.
* Equivalent after allowing for scrip issue. † On capital increased by rights and/or acquisition issues.

Dowding & Mills slips midway

AGAINST the directors' forecast, pre-tax profits of Dowding and Mills, electrical and mechanical engineer, slipped from £1,036,986 to £997,013 in the half year to December 31, 1979.

In November, they said that despite disruptions in the engineering industry, they were hopeful that first half results would be ahead of the corresponding period in 1978.

Six months' tax takes £430,000 (£415,000) and the interim dividend is 0.7p (0.59p) net.

Farnall Electronics back on course

TAXABLE profits of Farnell Electronics expanded from £4.05m to £5.12m in the year to January 31, 1980, on turnover ahead at £25.26m compared with £22.25m.

At midway, the directors said profits—up from £1.83m to £2.29m—had been affected by bad weather and strikes. They added then that second-half growth should continue at more normal levels.

A final dividend of 2.7p now announced lifts the total to 4p net, compared with last year's equivalent of 2.948p.

The taxable surplus includes non-trading income of £423,000 (£141,000). After tax of £2.23m (£2.13m), including a £418,000 credit for stock appreciation from previous years, earnings per 20p share are shown up from 12.44p to 18.63p. Dividends absorb £621,000 (£457,000).

● comment

The distribution of electronic components is one of the few growth areas left in this country as Farnell's good showing bears out. The main impetus behind the company's 26.4 per cent pre-tax rise came from the components business, which experienced sales volume growth of a quarter last year. The group has a strong cash flow and managed to triple its interest received to over £400,000. But the group's consumer goods division dropped 14 per cent in profit terms. However, this is a small part of overall business and was hit by import competition. Meanwhile, spurred on by components (which now account for three quarters of group earnings), pre-tax margins rose two points to an impressive 20.3 per cent. At 302p, down 2p, the yield stands at around 2 per cent — low yields are common in the sector for companies such as Unitech and Electrocomponents. The p/e comes to 16 on stated earnings.

Fairbairn calls for receiver

BY JOHN MOORE

DIRECTORS of Fairbairn Lawson, the troubled engineering group, have requested the group's bankers to appoint a receiver after the failure of several attempts to save the company.

Fairbairn's problems stem from a breakdown in the accounting systems in Greenbat, a major subsidiary. When this came to light last Spring, Fairbairn began to make provisions against major losses in Greenbat.

The extent of the problems took several months to clarify and the accounts and the AGM were delayed. Last December it was revealed that Atlantic Engineering and Co., a Jersey-based company controlled by a consortium of South African investors, had emerged as a buyer for Greenbat.

... In December Fairbairn received an approach from an unnamed suitor only three days ahead of the delayed annual general meeting.

Yesterday Fairbairn said that the offer would have been conditional upon the disposal of Greenbat which was approved by holders at the EGM on December 31 1979, but which was not completed. The potential offeror, a listed public company, withdrew from its discussions.

—Before the completion of the Breenbat transaction the company's bankers said that the continuance of banking facilities for the continuing group after completion of the Greenbat transaction was in doubt and that in particular all realisation proceeds, including those sums arising from the Greenbat disposal, must be used to reduce the available facilities to £2.1m.

As a result the directors did not consider that the prospective financial position of the group would have been sufficiently strong to support both the continuing operations and the liabilities which that operation would have assumed had the Greenbat disposal been completed.

The directors decided they should not proceed with the Greenbat disposal, but that instead they should continue to reduce bank borowings to the prescribed limits through the disposal of other assets.

By the beginning of March this year disposals had been agreed, mainly property assets, for a total of £2.73m, and subject to shareholders approval it was planned to inject further equity funds into the group of £0.4m. This would have reduced borrowings to approximately £2.4m and would have enabled the group to continue its operations.

The majority of the transactions were subject to the completion of the sale of the Wellington Industrial Estate for £1.75m.

But after months of protracted discussions the prospective purchaser was not in a position to exchange contracts for the sale of the property.

Since that time the directors had been examining other proposals for the disposal of the estate and other assets and "have been successful in obtaining serious proposals from public listed companies which could have resulted in a reduction to under half present borrowings of £5.5m. However, the company's bankers who have security over these assets have stated that these alternative proposals would not be acceptable to them."

The group also said yesterday that Westinghouse Electric S.A. had informed Flexiform, Fairburn's office furniture subsidiary, that it did not intend to renew the licensing agreement for the distribution of Westinghouse A.S.D. office furniture in the UK after December 31, 1979. An agreement with Westinghouse Electric was signed, however, for the orderly transfer of this section of Flexiform's business to Westinghouse, under which Flexiform would receive payments during 1980.

DUPLE SALE

THE ENGINEERING division of Duple International has sold its leasehold in the Wheatfield works Oldham for £670,000. In yesterday's report the sale price given was incorrect.

Unitech asks holders for a further £3m

ONLY EIGHT months after its £4.7m cash call, Unitech, the electrical component and equipment group, is making a £3m rights issue. The offer, on a one-for-ten basis at 180p, will involve 1,714,544 ordinary shares. This amounts to a discount of 40 per cent at yesterday's price of 302p.

Mr. Peter Curry, the chairman, said yesterday that the money would be used in order to maintain a level of working capital appropriate to a planned increase in sales volume.

Following the acquisition for £3.4m of Alfred Nehe Enatechnik, a German components distributor, Unitech's level of group sales is expected to exceed £85m on an annualised basis. This compares with £46m for the year ended June 1979.

Mr. Curry said that the rights issue funds would go initatally to reduce the group's borrowings, which stood at £10.6m at the end of last month. He also said that the money would be helpful in financing the growth of the components business.

The board of Unitech yesterday forecast a pre-tax profits rise of 35 per cent to £4.8m for the year ending May 31. It also repeated the earlier forecast dividend rise of 20 per cent to 8.7p at the gross level.

The acquisition of Enatechnik was announced in February and was conditional upon a pre-tax profit of more than DM3.9m (£931,000). Enatechnik has now achieved a pre-tax of DM5m (£1.2m) and the acquisition was therefore completed on March 28.

The German group has a franchise base which includes Intel, RCA, Burroughs, Harris and Motorola. Unitech claims that with this acquisition it is moving towards its goal of being a major European supplier of electronic components.

The book value of the net tangible assets of Enatechnik came to DM9.7m (£2.3m) as at December 31.

A circular giving details of the rights issue and further information regarding the Enatechnik acquisition is to be posted to shareholders today.

● comment

It seems a bit soon to hear from Unitech again, but this is an electronics company on the move. The Board has a vigorous policy of growth via acquisition and will increase significantly its group sales level by bringing Enatechnik into the fold. The German company seems to have been a good deal, on the newly released profit figures it cost less than three times pre-tax earnings and its net assets are £2.3m. But the main reason for Unitech's £3m cash call is not to pay for Enatechink—that came out of last summer's rights money. The current plans call for reducing borrowings and fuelling the further growth of the electronic components business. Based on the showing of fellow components company Farnell yesterday, this seems like a good idea. The issue is not underwritten, but the discount is sizeable at just over 40 per cent. The ex-rights yield on a forecast 8.7p gross total comes to around 3 per cent.

S. Pearson recovery gives £54m for year

PROFITS BEFORE tax and minority interests of S. Pearson and Son rose from £51.4m to £53.7m in 1979. The net dividend for the year is to be increased by a quarter, and the current year has got off to a "satisfactory" start.

Within these profit figures, the contribution from Pearson Longman was marginally higher at £25.7m. Pearson Longman, which is a quoted company with 63.6 per cent of its shares held by S. Pearson, is also proposing to increase its dividend by 25 per cent.

After allowing for minorities, Pearson's attributable profits rose from £39.2m to £40.4m pretax. By contrast, profits in the first six months of the year were down by over 12 per cent.

Behind this recovery lies a much higher contribution from the Midhurst Corporation, which takes in Pearson's North American interests, and a steadier performance at Royal Doulton. Profits here were badly hit by the transport strike in the first half of the year.

In a statement accompanying the figures, Pearson's chairman Lord Gibson said that the group had a long term programme of redeploying a significant proportion of its U.S. assets into direct investments carrying control. As part of this policy, the shareholding in Camco was increased to 60 per cent at a total cost of $23m. The market value of this investment at the year end was $46m.

In addition, part of the investment in Ashland Oil was sold in the year for $32.7m cash and the Blackwell Land Company, of which Midhurst owns 37 per cent, made its first profit.

Doulton's profits ended the year 3 per cent down, after a decline of around a quarter at the interim stage. Demand for tableware products was rather less buoyant in 1979, partly because of higher VAT, and although the engineering division improved on the previous year's poor performance, it did not match best hopes.

The glass merchanting side did well, but margins were reduced in the home improvement activities later in the year.

Lazard Brothers, the merchant bank within the Whitehall Trust, had a record year. Profits on corporate finance were higher than ever before, after allowing for provisions required in connection with operations where the bank decided to support its clients objectives and take a loss on its own account in the market. One instance of this came when the bank took a significant stake in Spillers in the course of the successful bid by its client, Dalgety.

The proposed final dividend for the group is 6.25p per share. The full year's payment is just covered by current cost earnings.

An abbreviated balance sheet showed that Pearson shareholders' funds rose fro m£168.2m to £195m during the year. This includes investments at £81.8m, against a valuation of £61.3m. Lord Gibson said that portfolio investments had only fallen by £6m despite the Ashland disposal.

Long-term borrowings rose from £59.6m to £72.7m, but net short-term borrowings dropped from £5.3m to £1.8m.

	1979 £000	1978 £000
*Turnover	483,785	401,309
Pearson Longman	199,666	174,797
Royal Doulton	238,996	209,705
Midhurst Cpn.	29,883	—
Other interests	7,920	11,236
Madame Tussaud's	7,320	5,571
Profit before tax	53,728	51,426
Pearson Longman	25,669	25,600
Royal Doulton:		
Tableware	7,445	8,815
Glassware Inds.	3,854	4,568
Engineering	2,207	1,650
Australia	192	†216
Associates	994	343
Interest, Expenses	838	670
Whitehall Trust	11,550	9,882
Midhurst Cpn.	5,655	2,074
Madame Tussaud's	2,048	1,896
Other interests	1,635	2,269
Interest, Expenses	6,684	4,484
Minority interests	13,370	12,254
Attributable	40,358	39,172
Tax	13,851	14,584
Net profit	26,507	24,588
Extraordinary credits	9,006	2,894
Making	35,513	27,482
Pref. Dividends	18	18
Interim Ord.	2,567	2,053
Final Ord.	4,279	3,419
Retained	28,649	21,992

* Excludes banking, and investment income.
† Loss.

Pearson Longman

Within the Pearson Longman group, profits of the Financial Times rose from £3.2m to nearly £4m pre-tax. All this increase came in the second half, a period when the company reported a loss in 1978.

Mr. Alan Hare, chairman of the Financial Times, said the figures were better than expected, partly as a result of the absence of The Times. He added that publication of the newspaper in Frankfurt was proceeding according to plan. Circulation from Frankfurt was now around 21,000 copies a day, roughly double the equivalent figure prior to this development, but sales would have to rise by much more in order to achieve targets.

Mr. Hare said it was very difficult to allocate costs and revenue to the Frankfurt project. The operation was thought to represent between 10 and 15 per cent of the paper's overall costs over a three-year period. In 1979, around a quarter of these costs were recovered in circulation revenue. "If you assume that 7½ per cent of the advertising revenue arose in consequence of Frankfurt, then the net loss on the development in 1979 was roughly £1½m," he stated.

This was well within last year's indication that running costs of Frankfurt would exceed attributable revenue by more than £4m in the three-year period. The hope was that 1982 would mark the turning point for the project in profit terms.

The Penguin and Longman book publishing interests of Pearson Longman had a difficult year. Longman's figures were affected by cuts in public sector education, the stronger pound and the fact that the Nigerian company ceased to be a subsidiary during the course of the year. On a strictly comparable basis, profits in 1978 would have been just under £9.9m, compared with the reported figure of £10.2m.

Penguin incurred non-recurring costs of between £600,000 and £700,000 in 1979, including redundancy and relocation expenses.

Viking Penguin lost around $1m after interest costs, and there is apparently a good chance that it will make profits in 1980. Penguin roughly doubled its investment in the acquisition of new titles to around £1.6m in 1979, and expects the benefits will start to show through towards the end of this year, and to a greater extent in 1981 and 1982.

Pearson Longman proposes a final dividend of 4.605p per share, taking the year's total to 8.355p.

In, 1978, S. Pearson made an unsuccessful take-over bid for the outstanding shares in Pearson Longman. Asked whether it might try again, Lord Gibson said he did not think such a move was likely in "foreseeable circumstances."

	1979 £000	1978 £000
Turnover	200,257	176,870
Financial Times	44,322	34,257
Westminster Press	84,920	72,784
Longman Holdings	38,638	41,454
Penguin Pub.	27,725	22,575
Ladybird Books	5,540	4,949
Inter-Company	788	1,257
Profit before tax	25,669	25,500
Financial Times	3,996	3,162
Westminster Press	13,404	10,287
Longman	8,437	10,157
Penguin Loss	381	*1,525
Ladybird Books	1,024	708
Pearson Lngman, Loss	811	938
Tax	10,705	12,777
UK	9,677	11,205
Overseas	1,028	1,572
Net profit	14,964	12,723
Minority	57	*307
Making	15,021	12,416
Extraordinary credit	8	†280
Attributable	15,029	12,136
Pref. Dividends	22	22
Interim ordinary	1,546	1,237
Final ordinary	1,898	1,519
Retained	11,563	8,388

* Profit. † Debit.

Tilling sees further progress

IN THE current year, Thomas Tilling, industrial holding concern, is expected to make further progress, says Sir Robert Taylor, the chairman, in his annual statement.

Members are told that 1980 has opened with continuing high inflation, onerous interest rates and a lack of growth in the UK and the U.S., where much of the group's business is conducted.

Despite these problems, however, he believes that Tilling's diversity protects it in some measure from adverse economic changes and that its companies have the ability and motivation to pursue their planned objectives, even in a tough climate.

The group is continuing an active investment programme both in capital expenditure and acquisitions, in the belief that its management and operational efficiency is capable of continuing to improve profitability and prospects.

It is planned to further extend operations in the UK and U.S., mostly by expanding those companies already owned and also profitable opportunities in other parts of the world will be explored.

During the past three years, £108m has been spent on acquisitions in North America and these are expected to make growing contributions to group profits.

As reported March 20, group sales rose 38 per cent to £1.42bn and pre-tax profits increased by 25 per centto £81.1m for 1979. Stated earnings per 20p share were 29.4p (24.6p) and the dividend total is being lifted from 4.818p to 7p net—1p higher than that forecast at the time of the £57m rights issue.

Inflation adjusted results, based on ED24, show historical pre-tax profits reduced to £52m (£47.9m).

Group fixed assets expanded by £92.6m to £251.4m reflecting growth by development and acquisition and also a property revaluation which produced a net surplus of £25.7m. Investments, mainly of a short and medium term nature, increased to £99.4m.

See Lex

GUTHRIE ALLOTMENT

Following the offer for City and International Trust, 215,822 new ordinary shares in Guthrie Corporation have become available for subscription by Guthrie's holders at 710p per share to provide the cash required to implement the cash alternative.

Applications have been received from Guthrie's holders for a total of 317,620 new ordinary shares. The available shares have accordingly been allotted in the proportion of one new ordinary share for every 16.7595 existing ordinary shares of Guthrie.

SPAIN

April 22	Price %	+ or —
Banco Bilbao	218	—4
Banco Central	236	—4
Banco Exterior	206	—
Banco Ind Cat	127	—
Banco Hispano	211	—4
Banco Madrid	149	—
Banco Santander	257	—1
Banco Urquijo	144	—2
Banco Vizcaya	222	—4
Banco Zaragoza	200	—4
Dragados	100	—
Espanola Zinc	62	—
Fecsa	58.2	—2
Gal Precrados	29	—0.5
Hidrola	64.2	—
Iberduero	58.5	—0.2
Petroleos	106.5	—1.0
Petroliber	59	—
Sogefisa	107	—
Telefonica	54	—
Union Elect.	63	—

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Bodycote holding on despite textile losses

LOSSES INCURRED by certain textile subsidiaries in the final quarter meant that second-half 1979 pre-tax profits of Bodycote International dropped to £0.99m against £1.21m last time. This left the full year figure up slightly from £2.06m to £2.14m, on turnover ahead by £5.51m to £35.38m.

The Board is confident that correct measures have been taken to prepare the group for a deepening recession with the comfort of an increasing liquidity.

Mr. J. C. Dwek, the chairman, says overseas earnings are likely to continue at their present level in 1980 and projections for the other mainstream activities do not indicate a disappoint full year result. The final outcome, however, will depend on trading conditions and the extent the recession affects margins.

The group is in good shape, poised to take advantage of any upturn in trade and should have available funds during the year to undertake further expansion, he adds.

After tax of £467,000 (£418,000) yearly earnings rose from 20.7p to 21.03p. A final dividend of 2p lifts the net total from 3.0323p to 4p.

The industrial protective clothing and safety products division continues to be the main corporate activity of the group, but the Board intends to develop a specialist engineering division, centred around Blandburgh, as part of an aggressive profit replacement programme.

Sir Monty Finniston has been appointed a non-executive director.

● comment

Bodycote teeters on the brink of a decision to close its Denby textile processing subsidiary. The outcome is important for it was not so very long ago that assets of £3m and more were tied up in Denby and, despite a flood of problems, the operation has not been very far short of profitability. But a wave of cheap U.S. imports has recently upset all recovery projections and, without further surgery, in the next few months, the outlook is grim. It comes as no surprise to learn that many of the textile businesses were hurt badly in the final quarter and it took further growth in protective clothing and the first fruits of diversification into the engineering sector to maintain a semblance of overall growth. Bodycote is clearly about to change its spots again, after a year of significant change, as Blandburgh spearheads a drive further into specialist engineering while the cash realised from the disposal of Polar will provide a useful liquidity cushion. A fully taxed p/e of 5.8 at 77p, down 3p yesterday, is possibly influenced more by the obvious problems in what are now peripheral operations and ignores the strength inherent in safety workwear but, on a yield of 7.6 per cent, income is very much a secondary consideration.

BOARD MEETINGS

The following companies have notified dates of board meetings to the Stock Exchange. Such meetings are usually held for the purpose of considering dividends. Official indications are not available as to whether dividends are interims or finals and the subdivisions shown below are based mainly on last year's timetable.

Interims:—British Assets Trust, Long and Hambly, North British Properties.

Finals:—Amalgamated Metal, B.S.G. International, B & Q (Retail), A. & C Black, Blue Circle Industries, Copydex, Corinthian Holdings, Delta Metal, Elbar Industrial, E. Fogarty, Gosforth Industrial, Norman Hay, Laing Properties, Laporte Industries, London and European, John Menzies, James Neill, Office and Electronic Machines, Spear and Jackson, Thomson T-Line Caravans, Wight Holdings.

FUTURE DATES

Interims:—	
Devenish (J. A.)	May 7
Kwik Save Discount	Apr. 25
Lawrence (Walter)	Apr. 24
Ulster Television	May 9
Vaux Breweries	May 9
Wemyss Investment	May 1
Wlvrhampton. & Dudley Brews.	May 30
Finals:—	
Allied Plant	Apr. 28
Anchor Chemical	Apr. 24
Boot (Henry)	May 1
Bremner	Apr. 25
Brixton Estate	May 7
Clive Discount	Apr. 25
Debenhams	May 22
Estates and Gen. Investa.	Apr. 28
Francis Industries	Apr. 25
Gerrard and National Discount	Apr. 30
Grattan Warehouses	Apr. 24
Lazard Bros. Sterling Res. Fd.	Apr. 29
Maclellan (P. and W.)	Apr. 24
Mothercare	May 6
Nathan (B. and I.)	Apr. 28
Rush and Tompkins	Apr. 25
Stylo Shoes	Apr. 25
Walker (J. O.)	May 1

Rediffusion Television tumbles

AFTER associated losses of £1.77m compared with a profit of £1.84m, pre-tax profits of Rediffusion Television for the six months to January 29, 1980 slumped from £3.11m to £400,076.

In *previous years* Thames Television, of which Rediffusion Television holds marginally over 50 per cent has been treated as a subsidiary. It was now been accounted for as an associate, and comparative figures have been adjusted.

In the second half of 1979, Thames sustained losses through industrial action. It is estimated substantial pre-tax profits were made in the first three months of 1980 but it is likely the company will sustain a small loss for the nine months to March 31, 1980.

Rediffusion Television has decided to change its accounting date to March 31 and the directors forecast a profit of some £2.75m for the nine months to March 31, 1980, compared with £9.22m for the previous year.

The company is held 62.6 per cent by BET and 37.4 per cent by Rediffusion Ltd. No interim ordinary dividend has been declared.

Turnover of Rediffusion Television totalled £17m (£19m) for *the six months.* Tax for the period took £295,000 against £1.68m and the attributable *balance fell from £1.43m* to £105,000.

Travis & Arnold over £7m: dividend rise and scrip

REFLECTING improved trading margins, 1979 taxable profits of Travis and Arnold, timber and building materials group, rose from £4.69m to £7.25 after being £0.23m ahead at £2.41m midway.

The dividend is stepped up from 4.2586p to 7.61p net with a final of 6p, and the directors are planning a one-for-one scrip issue.

The first quarter of 1980 has produced sales and profits considerably ahead of the depressed first thre emonths of last year, say the directors. But they add that the outlook for the remainder of this year is for more difficult trading conditions.

After a poor start, activity in the building industry remained at a reasonable level during 1979, especially in the repair, maintenance and improvement sector. Turnover expanded from £73.42m to £96.83m, including £23.55m from 12 months' sales of Ellis and Everard, compared with £9.2m for four months in 1978. Trading profit from these sales *improved considerably from* earlier years, say the directors, and made a sigificant contribu*tion after adjusting for interest* on the cost of acquisition.

The profit this time is struck *after sharply increased interest* charges of £615,000 (£277,000) and includes a surplus from the *sale of properties of £236,000* (£26,000).

Tax takes £3.02m (£1.99m) and dividends absorb £609,000 (£279,000), leaving a retained profit of £3.59m (£2.39m).

Earnings per 25p share are shown at 84.7p (56.5p) before tax, and 49.2p (32.3p) after.

● comment

Travis and Arnold's profit is at least £1m better than the most optimistic City estimates, and the *shares climbed 20p yesterday to* 270p. Ellis and Everard, acquired in August, 1978, has become a *big profit maker more quickly* than expected. Also, the group as a whole gained from timber price increases and buoyant repair and improvement markets. A strong start in 1980 will be difficult to sustain as the outlook for new housing, which takes 40 per cent of the company's output by volume, is poor. With 1979 earnings of 40.5p a share fully taxed, the 7.16p dividend seems miserly —the yield is only 3.9 per cent. But the group wants to live with Ellis another year before passing some of its benefits on to shareholders.

EDITH ahead and pays more

PROFITS OF Estate Duties Investment Trust (EDITH) rose from £2.55m to £2.98m in the year to March 31, 1980, before tax *of* £0.99m against £0.91m.

A final of 1.5p lifts the net dividend to 2.3p compared with *an equivalent* 1.909091p, and, following the pattern of previous years, the directors are *proposing a scrip issue of one-for-10.*

Earnings per 25p share are shown as 2.49p (2.12p).

Charles Hill loss reduced —no dividend

TURNOVER WAS down from £15m to £12.75m but Charles Hill of Bristol, civil engineering, building, property group, finished 1979 with reduced pre-tax losses of *£184,875, compared with £740,386.* However, there is no ordinary dividend for the period.

At halfway, losses had been cut from £500,000 to £6,000, and although the interim had been omitted, as in 1978, the directors said the possibility of a final would be considered when full-year results were known—last year a final of 2p was paid, against a total of 7.26p in 1977.

There was a £283,698 loss from continuing businesses, compared with a £7,879 profit—last year there was a £787,855 loss from businesses sold.

Interest charge was £50,565 (£29,511 credit) and there was an exceptional credit of £191,655 (nil). Asociates' contribution was a £42,267 yoss against a £10,129 profit previously, leaving the pre-tax figure.

Tax credit was higher *for* 1979, at £37,796) and there was an extraordinary credit of £26,065 (nil).

Loss per £1 share is given as 13.1p against 62p.

Chesterfield Props. nears £2.9m

With second-half pre-tax profits improving from £1.14m to £1.56m, Chesterfield Properties reports an increase of £632,000 to £2.86m for 1979, on turnover of £4.66m, against £4.18m.

The pre-tax figure is arrived at after interest down from £876,000 to £782,000, but this excludes development outgoings £465,000 (£67,000) net of tax.

After tax up from £1.08m to £1.32m, stated earnings per 25p share are 7.77p, against 5.83p, and the dividend total is effectively raised from 4p to 5p net, with a final of 3p.

Wadkin profit slumps to £0.37m

THE STRONGER pound, the increasing inflation rate and industrial disruption severely hit *pre-tax profits of Wadkin* which slumped from a best-ever £2.05m to £0.37m for 1979, on increased turnover *of* £25.23m against £23.65m. In the second half of the year, the woodworking and metalworking *machinery* group incurred a loss of £0.25m, compared with profits of £1.04m last *time.*

In the first quarter of the current year, order intake has materially improved over the same period of 1979. However, some models are being sold at reduced margins overseas until the effects of cost reduction exercises work through. This and the investment necessary to carry through the programme lead the board to expect only a partial recovery in profitability this year and a fuller recovery in 1981.

The company is responding to the challenge of a strong pound by reducing manufacturing costs. A major programme to restructure and simplify the product *ranges manufactured* at each production unit is being carried out.

Last year, stock rationalisation costs reduced taxable profits by £392,000 (nil), while interest *charges increased from £130,000* to £175,000. Tax was down from £394,000 to £186,000 and after an extraordinary credit this time of £104,000, attributable profits emerged at £285,000, against £1.66m.

Stated earnings per 50p share plunged from 34.48p to 3.77p, but the dividend total is kept at 6.47p net with a final of 4.22p (same).

● comment

Investors who bought Wadkin for capital growth are back where they started three years ago. Down 1p yesterday to 76p, the shares are now within a whisker of the 1977 low point. Although the group warned as to the effect of a disrupted labour relations and adverse currency movements, the second half loss is still something of a surprise and the maintained distribution, yielding 12.8 per cent, is the only immediate share price support. After an indifferent four-year track record it had become clear that the decision by the new management to grasp *a painful* nettle was somewhat overdue. While the downside now looks limited, a swift *rerating will* depend on the success of the stock pruning and plant reorganisation effort. That *may take up to three years* but in the meantime Wadkin's strong assets and powerful *market* share might be sufficient to attract a bid should profits stumble once more amid the first of many new hurdles.

M. F. North £68,000 downturn

DESPITE an increase in interest received from £44,633 to £118,588, taxable profits of M. F. North, hotel concern, were down to £674,181 for 1979, compared with £742,506. Turnover was also behind at £3.95m against £4.25m.

After much lower tax, however, of £134,541 (£269,689), net profit came out ahead at £539,640 compared with £472,817, giving earnings of 2.07p (1.81p) per 10p share. And the dividend is effectively raised to 0.8p (0.466p) net with a final of 0.675p.

United Carriers £1m advance: confident for current year

A STEADY advance throughout the period has left taxable profits of United Carriers, express parcel service concern, at a record £3.86m for the year ended January 26, 1980, compared with £2.85m. Turnover expanded from £21.58m to £27.3m.

Yearly earnings per 10p share are shown as 20.5p, against 16.2p, and the dividend is boosted to 5p (2.93146p) net with a final payment of 3.5p.

Mr. Graham Millard, chairman, states that the company is confident of future prospects despite the difficult trading conditions.

At the interim stage profits *had risen to £2.02m (£1.52m)* and directors looked forward to another satisfactory year.

After tax of £1.34m (£860,000) for the full period, and dividends of £617,486 (£359,515), the *amount retained was £1.91m* compared with £1.63m.

Progressive investment in new property, vehicles, plant and machinery, continued, the chairman *says,* amounting to £3.92m, with the group maintaining a cash balance of £1.19m.

● comment

United Carriers has had a good year. Pre-tax earnings are up 35.6 per cent on turnover about a quarter higher. After stripping out £185,000 of investment income, £19,500 from the newly acquired Abel Systems and leasing profits of £50,000, the group's organic growth comes to nearly *£750,000.* This stemmed partly from a 3 per cent increase in the amount of traffic carried by United's fleet and also from a 17½ per cent rates rise last June. The company says that traffic has declined by 10 per cent so far in 1980, but is hoping that this represents the bottom of the trough. Even if consumer spending slumps (70 per cent of the business is carrying for the retail trade) there is some flexibility in that 15 per cent of United's labour force is casual and can be adjusted according to demand. The total dividend is up 70 per cent, *for a gold of* 5.4 per cent at 135p, up 5p. The p/e on fully taxed earnings comes to 8.8, which may be a *trifle* high because of speculation over a future bid from Lex Services, a *leading competitor.*

Oxley Printing slides to £0.67m

A SEVERE downturn from £848,000 to £67,000 in the second half, resulted in pre-tax profits of Oxley Printing Group for 1979 being substantially lower at £674,000 against £1.55m.

Problems encountered in commissioning a new £1.2m Web Offset press, and a sharp and sudden fall-off in orders in several market areas gave rise to substantial losses in the first quarter. The transport and engineering striges also had a very damagin effect on business. At the interim stage business was said to be buoyant in most divisions, and the board was confident for the future.

Mr. P. Brabrook, the new chairman, says that because of the *unfavourable* trading *climate in* the company's industries, it would not be prudent to make a *forecast for the current year,* but he is confident that the substantial capital investment of recent years will enable it to take *full* advantage of an improvement in trading conditions.

The pre-tax figure was arrived at after interest up from £419,000 to £617,000. After tax £103,000 (£104,000), stated earnings per 25p share are down from 20.42p to 7.04p, but the final dividend is raised from 1.5661p to 1.6p, making the total 3.1p, which, when grossed up, represents an increase of 7.4 per cent on the *previous year's 2.7537p.*

MY Dart halftime decline

HIGHER interest charges and depreciation reduced pre-tax profits of M.Y. Dart from *£810,000 to £755,000 in the 28* weeks to December 29, 1979. The rise of £82,000 to £189,000 in interest reflects *higher* rates and increased borrowings which were not reduced until the proceeds of the rights issue were received in November. Depreciation amounted to £298,000 against £260,000.

The interim dividend is unchanged at 1p — last year's total was 2.8p from pre-tax profits of £1.75m.

Group sales advanced 23 per cent to £11.02m *in* the first six months, all three divisions — sports equipment, packaging materials and pyrotechnics — achieving increases. The sales turnover would have been greater but for a serious downturn in the closing weeks of 1979.

The chairman says some of *the group's companies* are likely to do appreciably better in the second half; for others, the *outlook is less clear.*

For the medium and longer term, he is confident that new *products* and improved *production* methods now being developed, will ensure the *continuance of a satisfactory* growth in the performance of the group.

MINING NEWS

Call for Canada mineral policy

BY KENNETH MARSTON, MINING EDITOR

A CALL for a comprehensive minerals policy to protect Canada's economic future has been made by Mr. William D. Mulholland, president and chief executive officer of the Bank of Montreal, in a speech to the Canadian Institute of Mining and Metallurgy at the latter's annual meeting in Toronto.

He said that such a policy should be a marriage of national mineral policy and industrial strategy "based on co-operative, rather than competitive, relationships between government and business."

It should also ensure that "we have the fullest possible knowledge of the extent of our resources and that we have the private sector companies who can bring them on stream with minimal lead times at competitive prices.

"On any reading of Canada's prospects, the capacity of our mining industry to locate and develop orebodies will remain fundamental to our economic strength. In my view this point has tended to be ignored outside the industry.

"On the one hand we have governments eager to raise revenue and please other vocal constituencies—I need only mention British Columbia's recent moratorium on uranium exploration—on the other hand we have analysts rushing headlong after energy and the manufacture of high technology end products.

"Sometimes we seem to forget that a healthy, vigorous and productive resource sector would be one of Canada's highest cards in the international economic game yet Canada has too often neglected its mining industry."

He concluded that great care was needed to see that taxes and costs of doing business did not reduce profits to levels that could discourage investment. "Without confidence in a reasonable rate of return, we would see a withering away of investment, exploration, research and development and eventually the industry itself."

● Denison Mines reports a first quarter net profit of C$ 16.4m (£6.2m), equal to earnings of 89 cents (33.7p) per share, which compares with C$ 15.6m in the first quarter of last year and the 1979 total of C$ 56.1m. The modest improvement in the latest earnings is attributed to higher revenue from oil and gas plus a substantial increase in other income — including C$ 6.2m arising from the Reserve Oil and Getty Oil termination agreement—but it was partly offset by higher uranium production costs and slightly reduced sales of the material.

BAGUIO RECORDS ANOTHER LOSS

Despite favourable markets, **Baguio Gold Mining**, now mainly a copper producer, in the Philippines, made a loss in 1979 for the third consecutive year, reports **Leo Gonzaga** from **Manila**.

The net loss was Pesos 370,000 (£22,900), compared with Pesos 2.03m in 1978 and Pesos 3.29m in 1977. Interest charges of Pesos 9.2m and higher production cists more than offset a 59 per cent rise in copper sales and a 9 per cent rise in gold sales.

By contrast, **CDCP Mining** started commercial production last June and in its first six months of commercial operation earned a net Pesos 27.1m (£1.68m) from sales of copper, gold, silver and molybdenum.

Encouraged by this early success, CDCP has decided to expand capacity to 22,500 tonnes of ore a day from 15,000 tonnes at its mine on Negros Island in the central Philippines.

Black Mountain set to clear debt

BLACK MOUNTAIN, the base metals joint venture of **Phelps Dodge and Gold Fields of South Africa** in the north west Cape, will become "financially self-supporting" this year, Mr. Ian Mackenzie, chairman of **Standard Bank of South Africa**, said at the official opening of the mine yesterday, reports **Bernard Simon from Johannesburg**.

Mr. Mackenzie said that the mine's net revenue should reach R100m (£55.6m) a year on the basis of the average prices for its products prevailing over the past nine months. Capital outlays have totalled R170m, compared with an original estimate of R181m. Production started late last year.

Black Mountain's annual output will include 132,000 tonnes of lead concentrates, 35,000 tonnes of zinc concentrates and 22,000 tonnes of copper concentrates. Some 113,000 KG of silver will be extracted as a by-product. The sharp rise in the silver price is a major reason for Black Mountain's short payback period.

Besides proven economic ore reserves of 38m tonnes, drilling has indicated an additional 200m tonnes of lead, zinc, copper and silver-bearing deposits.

Mr. Mackenzie said the mine's milling rate is expected to reach the designed capacity of 94,000 tonnes a month by mid-year.

PROFITS CLIMB AT WIT. NIGEL

The soaring bullion price during the early weeks of this year has made a strong impact on fortunes of Witwatersrand Nigel, the small independent gold producer in South Africa.

Net profits for the quarter to end-March reached R1.3m (£725,000), nearly double those of the previous quarter, and over four times greater than in the full year to June 30, 1979.

The company says that the downward trend in gold output, which reached a low of 69 kilogrammes in January has been arrested and that production should now be maintained at a monthly average of some 80 kg.

If current levels of revenue are maintained and capital expenditure is incurred as projected, it is unlikely that any liability for tax on mining will arise in the current year to June 30, the company concludes. Wit. Nigel paid a single dividend of 1½ cents for the year to end-June 1979.

ROUND-UP

Australia hopes that the EEC will help in developing its vast deposits of uranium, coal and gas, Mr. Douglas Anthony, the Trade and Resources Minister, told an EEC delegation in Canberra. But Australia became concerned when there was no opportunity to redress trade balances, he added.

* * *

Broken Hill Proprietary, leader of an international consortium, expects to start development of the Ok Tedi copper-gold deposit in Papua New Guinea next February. A financial scheme will be submitted to the Government by the end of October. Mining of the deposit's gold cap will start in 1984 and copper and gold operations in 1986.

* * *

Compagnie Royale Asturienne des Mines, the Belgian lead and zinc producer, had a 1979 net loss of BFr 2.6bn (£39.1m), of which BFr 2.4bn was attributable to losses on its Spanish operations.

BIDS AND DEALS

Mr. Narby's companies to accept offer for Furness

MR. FRANK NARBY'S Dolphin Investments and Helix Investments, which together own 15.7 per cent of Furness Withy, have announced that they will accept the offer made by C. Y. Tung's Orient Overseas Containers (Holdings) for Furness. Furness shares closed 14p higher at 385p yesterday against the offer price of 420p.

Mr. Narby understands that his associate, Canadian National Railways, also intends to accept in respect of its 3.3 per cent holdings. This means that another obstacle in the way of the Tung group's £113m bid for Furness has been removed.

However, the bid still has to cross the hurdle of a possible referral to the Monopolies Commission. The offer closes on Friday and normally the Government makes up its mind about referring cases to the Monopolies Commission before the first closing date.

In an answer to a written Parliamentary question yesterday, Mrs. Sally Oppenheim, Minister of State for Consumer Affairs, said that a decision on the Tung bid would be made as soon as possible. It is understood that this could be announced on Thursday.

Mr. Narby and Mr. C. H. Tung have had extensive discussions over the last couple of months on the subject of Eurocanadian's 37.6 per cent stake in Manchester Liners, which is majority controlled by Furness. Eurocanadian Shipholdings (owned by Delphin, Helix and Canadian National Railways) acquired the Manchester Liners stake during an earlier takeover battle.

Although no specific agreements have been reached, Mr. Tung has told Mr. Narby that once the offer for Furness becomes unconditional he intends to give "urgent attention" to Manchester Liners and in this respect will "pay due regard" to the interests of all Manchester Liners' shareholders.

Manchester Liners operate on the North Atlantic as does Cast Containers (owned by Eurocanadian) and Dart Container-line (one-third owned by Orient). There is considerable overcapacity on this route and considerable scope for rationalisation.

According to the latest Containerisation International Yearbook 1980, Dart operated four container ships with a total carrying capacity of 6,285 teu. Manchester Liners controlled 10 containerships (5,142 teu) and Cast has six vessels (4,528 teu).

Maple's record figures back bid rejection

By Arnold Kransdorff

Maple and Co. (Holdings), the furniture retailer, yesterday backed its rejection of the £8.6m bid from Waring and Gillow (Holdings) with the announcement of record profits for 1979-80 and a doubled dividend.

Pre-tax profits for the year ended February 2, 1980, increased by more than a third to £1.4m and the net dividend is being raised to 1.5p, with a final of 1.25p. The directors are forecasting at least a similar payout for 1980-81.

Mr. David Keys, the chairman, says that the Waring and Gillow offer places a "wholly unacceptable value" on Maple shares. He points out that there are factors which do not relate directly to current trading operations and which also have considerable value.

These include properties surplus to trading activities which are valued at £1.2m and, owing to past losses from the development in Tottenham Court Road, London, tax relief on future trading. "It might reasonably be assumed that the present value of these tax losses is approximately £2m," says Mr. Keys.

"If this discounted value and the value of the surplus properties are deducted from the cash offer of £8.4m, the bid values Maples' trading activities at only some £5.2m, he adds.

Mr. Keys discloses that a valuation of the group's main freehold and leasehold properties af March 31, 1980 revealed a surplus over the written-down book value at February 2, 1980 of some £3.2m. The written down book value of the stores not revalued was £0.32m.

If the properties had been included at the valuation of £8.4m and the £2m discounted value of the tax losses, net tangible assets attributable would be some £10m or about 35½p per share, he states.

To this should be added a substantial sum to reflect the current costs of fully fitting out Maple stores—an amount Mr. Keys estimates at some £11.5m for the UK alone, in addition to the cost of sites and buildings.

Lilleshall earns and pays more

THE 1979 improvement in pre-tax profits forecast by Lilleshall Company at halfway, when an advance from £126,000 was reported, turns out to be from £273,000 to £404,000.

Earnings per 10p share gained 3.1p at 15.5p and the final dividend is 2.5p for a 3.5p (1.933p) net total.

Mr. Allan Pike, chairman of this steel and engineering group, says the current year started amid industrial strife and operations have had to be conducted in a trading environment which in many areas remains difficult.

However, all divisions have traded profitably, with the exception of steel rolling. The steel strike has caused trading losses in this division.

	1979 £000	1978 £000
External Sales	11,908	10,384
Stockholding	6,387	5,668
Steel Rolling	4,987	4,227
Engineering	2,148	1,793
Estates	468	335
Housing	—	60
Inter group	2,092	1,719
Trading profit	451	312
Stockholding	176	83
Steel Rolling	81	138
Engineering	91	82
Estates	103	29
Housing	—	*20
Interest	47	39
Profit before tax	404	273
Profit after tax	348	280
Extraordinary profit	39	12
Net profit	387	292
Retained	303	242

* Loss.

Warner Holidays pays £0.35m for Welsh site

Warner Holidays, Britain's only independent holiday camp operator with a Stock Exchange quotation, is expanding its UK interests into South Wales. Warner is to pay £347,000 for Greenway Holiday Park, a self-catering caravan and camping site at Oxwich Bay on the Gower Peninsular.

The new site—which will strengthen the company's self catering division—will be managed by Mr. Henry Warner, a nephew of the chairman, and the first of the third generation of Warners to enter the family business. Mr. Warner said that there were several other young members of the family available to join the business at the appropriate time.

Mr. Bill Warner, the chairman, said yesterday that the 30 acre site was capable of further development. But he is going to "wait and see how it goes" before deciding on any further expansion there.

Mr. Warner said that there had been no progress on the East Coast development but the self-catering apartment complex at Arenal in Majorca was fully booked.

In their statement Warner points out that an appeal has been lodged against a planning enforcement order which may affect a part of the camping activity at the Greenway holiday park. Pending the outcome of this move £75,000 of the purchase consideration has been retained by the company.

Completion of the deal is scheduled for the end of this month and settlement will be from the company's cash resources.

Warner's holiday centres are concentrated in the Isle of Wight, Hayling Island (Hampshire), Devon, Essex, Kent and Suffolk. It also operates in Majorca.

With little change in bookings, profits in the first half were virtually static at £356,000 against £354,000. Since July, however, bookings had recovered sharply and profits for the full year are expected to exceed £1m, against £818,000.

Brown Boveri Kent dips as exchange losses bite

PRE-TAX profits of Brown Boveri Kent (Holdings), industrial instrument manufacturer, dropped from £7.44m to £5.79m in 1979, with the second half showing a fall of £1.16m to £2.72m. These figures were struck after interest charges, up from £1.17m to £1.98m.

Exchange losses accounted for £1.13m against £245,000, with minorities lower at £300,000 (£736,000). There were expenses last time of £76,000.

After tax of £1.92m (£1.88m), net profit was down from £4.51m to £2.44m, and £1.25m (£3.32m) was credited to reserves. Stated earnings per 50p share are lower at 6.58p (9.47), and the final dividend of 1.2p (same) leaves the total unchanged at 2.2p.

Directors say the disappointing performance reflected both the continuing recession in the main industries which the company serves and the non-familiar adverse effect on turnover caused by the rise of sterling.

Despite these problems, UK exports increased by 17 per cent, and for the first time provided more than 50 per cent of the turnover achieved by the UK-based companies. The reduction in profitability was partially caused by increased pressure on margins in a generally depressed market, and also significantly increased interest charges.

British manufacturing industry is going through a difficult period, they add, and while prospects in industrial measurements and meters remain encouraging, thelow level of capital investment in process plant for established markets gives cause for some concern.

The broad international nature of the company, with several markets outside the UK continuing to be strong, should provide the opportunity for satisfactory performance. New manufacturing facilities and products provide a sound foundation for progress in the future, they conclude.

Turnover during 1979 was up from £81.12m to £86.4m.

● comment

Overcapacity in chemical and steel plant has depressed new project starts internationally, with a corresponding effect on Brown Boveri Kent's process control division. The business was also hit by Italian and UK strikes and high sterling in the face of U.S. competition. The group's trading profit shortfall looks to have been solely due to a slide in the 30 per cent or so contribution from controls. Capital expenditure has increased bank borrowings to perhaps £12m, which will probably hold steady this year. Substantial recovery should come with an upturn in the capital investment cycle, but countries like Pakistan and Korea will by then probably be adding their weight to the competition. For the current year, perhaps £6m pre-tax is in sight, indicating a prospective fully-tax p/e of 6.3 at 31p, up 2p, on an historic 10.5 per cent yield.

£1.1m fall at J. B. Holdings

A £1.09m decline in pre-tax rofits is reported by J. B. Holdings, construction and mechanical engineer, for 1979. The full year figure turned in at £1.73m, after a fall from £0.96m to £0.86m at halfway.

The directors say that the cutback in Government spending, which has so far resulted in a substantial reduction in spending on capital projects and on supplies of goods and services rather than in any curtailment of public sector overheads, reduced demand for the group's UK civil engineering and civil engineering supply activities.

Also inflation and the increased value of sterling affected the profitability of exports of overseas activities.

However, they now state that the current year should show a return towards the better results achieved in earlier years.

Earnings per 10p share for 1979 are shown to have fallen from 17.42p to 7.54p, but the total dividend payment is stepped up from 1.47p to 3p with a final payment of 1.5p net.

On turnover of £30.57m (£25.4m), civil engineering, building and road maintenance accoutned for 28.1 (26.2) per cent, civil engineering supplies 19.9 (21.5) per cent and engineering and hydraulics 52 (52.3) per cent.

A breakdown of pre-tax profits shows: civil engineering, etc. at £273,000 (£843,000 including £625,000 on final settlement of contract to construct an airport in the Falkland Islands), civil engineering supplies at £462,000 (£717,000) and engineering and hydraulics at £991,000 (£1,253,000).

	1979 £000	1978 £000
Turnover	30,572	25,401
Profit before tax	1,726	2,813
Tax	872	1,042
Profit after tax	854	1,771
Extraordinary debit	49	—
Available	805	1,771
Interim div.	150	50
Final	150	97
Preference div.	100	29
Retained	405	1,595

Wilson Connolly profits up 54%

On turnover up by 11.4 per cent from £25.84m to £28.8m, Wilson (Connolly) Holdings has boosted profits from £3.53m to a record £5.45m for 1979, a 54.4 per cent increase.

And the dividend has jumped to 7.25p, against 3.1311p, with a final payment of 3.75p net per 25p share. Also proposed is a one-for-one scrip issue.

At halfway, there had been a £1m advance to £2.53m.

The year's tax charge took £2.86m against £1.76m, and after the dividend cost; the amount retained came through at £2.15m (£1.56m).

Basic earnings per share are shown as 48p (33.6p) and 47.4p (32.1p) fully diluted.

Mr. J. A. Leavey, chairman, says that in spite of bad weather at the beginning of the year, 1979 was good for housebuilding, with this division contributing, as previously, about 75 per cent of group profits—over 1,000 units were sold at an average price of £17,800 from some 50 sites.

Taking trading, rents, interest and capital profits together, profits of the property sector were up by 90 per cent to £1.4m for the year.

The land bank of 7,000 plots would be valued at about £2.5m more than book value, Mr. Leavey states.

The property portfolio has been assessed at some £10m, which compares with a book value of £6m.

The contracts side of the business was less profitable than in 1978, but the chairman feels it did well to obtain 32 separate contracts and build 580,000 sq ft of factories, warehouses and offices. Currently, jobs for completion in 1980 amount to about 600,000 sq ft.

In the group's services division, which comprises plant hire, plastering, and electrical contracting, "1979 was a year of hard decisions," the chairman says.

Plant hire did well with higher profits, "but in plastering and electrical we had to grasp the nettle and effectively wind-up these operations and to provide for closure costs of £216,000."

BURNDEPT/CYFAS

The Kent-based Burndept Electronics, which is 51 per cent owned by the NEB and 49 per cent by the Berec Group, has acquired Cyfas, a private company of Crawley, Sussex.

Burndept is one of the foremost UK companies in the field of mobile and handportable radios and related control systems. Cyfas is a leading supplier to the similar markets of computer-based communications and data systems.

Steel Brothers declines but sees scope for improvement

DESPITE PROFITS from Canadian operations which were more than doubled in local currency terms, Steel Brothers Holdings, international trading and manufacturing group, saw its pre-tax surplus slip from £6.47m to £5.81m in 1979.

But the dividend is increased from 7.15p to 8p net with a final of 4.85p and the directors say that, subject to world trading conditions, good scope exists for improvement in the current year.

The surplus is struck after interest of £2.25m (£2.19m) and includes associates' profits of £0.6m (£1.68m). The downturn was due to adverse exchange rates, lower profits from the Middle East and unexpected losses from rice milling and trading in the second half.

Turnover was £100.78m (£96.88m) and after tax of £2.65m (£2.92m), net profit was £3.15m (£3.55m). Stated earnings per 25p share are 23.78p (28.51p).

There is an extraordinary credit this time of £492,000 (£49,000 debit) and minorities take £494,000 (£384,000), leaving the attributable surplus slightly higher at £3.15m (£3.12m). Dividends absorb £919,000 (£822,000).

● comment

A shortfall in associate income provides the clue to Steel's problems in 1979 and a swift pre-tax recovery depends on the fortunes of rice milling and more strengent control of stock and debtors in Middle Eastern food operations. The Middle East contributed 48 per cent of last year's profits but Canada (41 per cent) offers earnings of a somewhat higher quality. Prospects in North America look encouraging, particularly since the Utah lime plant will be on stream in the summer. But Weiner, in Holland, is a persistent headache although the order book is substantially better than the comparable period of last year and recent diversification may be enough to tilt the balance between success and failure. Over the loner term, Steel is confident that the recipe for its Middle East food businesses can be switched to North America and the Far East (where a start has already been made) and airline catering is another avenue for useful expansion. Adverse exchange rates probably trimmed profits by a tenth last year and, until the currency hedge argument for overseas traders is restored, the market's very neutral verdict — marked by a near double digit yield and a fully taxed p/e of under 5 is about right.

Mercantile Investment

tile Investment Trust gave their directors an easier time at yesterday's annual meeting than they did no the same occasion 12 months ago. Several, however, again expressed disquiet about the size of the discount between the company's net asset value and its share price.

Mercantile hit the headlines exactly a year ago when more than 100 rebel shareholders put forward a special resolution calling effectively for the company's liquidation. The resolution was easily defeated.

Yesterday, Mr. John Manser, investment director of Save and Prosper which through its unit trusts holds 6.5 per cent of Mercantile and which last year gave the directors two years to come up with a solution, questioned the board's dismissal of unitisation in the annual report.

Unitisation expenses he beleived, could not be so onerous as suggested while the advantages of gearing would in any case be partly lost since half the prior charge capital and all foreign currency loans were repayable by October 1983. Mr. Manser added that if the board thought redemptions would be high after unitisation and lead to management problems of the assets remaining in the portfolio, their fears should lead them to redouble their efforts "in searching for a means whereby the discount can be eliminated."

Mr. Manser said the board's one "positive suggestion" was repaying part o fthe capital but instead, he asked, could the company not be split into two—an investment trust holding gearing, unquoted securities and special situation: and a conventional unit trust.

Mr. Jerry Jamieson, Mercantile's chairman, said the company's lawyers were looking at this sort of proposal.

NORTH AMERICAN NEWS

Doubled income at Texaco

BY DAVID LASCELLES IN NEW YORK

TEXACO, the first large U.S. oil company to announce results for the opening quarter of 1980, yesterday said earnings had nearly doubled for the period, though the volume of sales had declined.

This gain, which was somewhat larger than Wall Street had expected, excludes proceeds from the sale of Texaco's share in Belridge, the Californian oil company which Shll Oil bought last year for $2.65bn.

Texaco's first quarter earnings were $600.6m or $2.21 a share up from $303.9m or $1.11 in the same period last year. On top of this, the Belridge proceeds amounted to $402.3m, bringing Texaco's total worldwide income to just over $1bn or $3.69 a share.

Mr. Maurice Ganville, chairman, said the improvement in U.S. earnings, which accounted for 43 per cent of the total, was due mainly to stronger petroleum prices, capital investment and streamlining. However, the results had been affected by President Carter's new tariff on imported oil and the windfall profits tax which came into effect during the quarter.

Non-U.S. earnings were also helped by strong prices, new investments and higher petrochemical earnings.

Mr. Granville said that Texaco's higher earnings would enable it to increase its capital budget for this year to $2.3bn from $1.6bn in 1979.

Most of this would be spent on exploration and production in the U.S.

Texaco's first quarter sales (excluding Belridge), were $13.25bn, up from $8.36bn in the same period last year. However, this was due exclusively to price increases.

Texaco's sales of petroleum products fell 9.7 per cent from last year and natural gas sales fell 8.6 per cent.

Production of oil and gas declined by 6.4 per cent to 3.5m barrels a day and refinery runs fell by 2.6 per cent to 2.8m barrels per day.

Eastern Airlines hit by fuel costs

By Ian Hargreaves in New York

EASTERN AIRLINES, the Florida-based international carrier, saw its earnings slashed in the first quarter of the year in spite of a 30 per cent increase in sales and higher passenger and cargo volumes.

The company reports net income of $3.5m compared with $13.2m. Sales were up from $662m to $854m.

Mr. Frank Borman, the chairman, blamed the profits decline on sharply higher costs, especially for fuel, the price of which more than doubled over the same quarter of 1979.

Earlier this week Trans World Corporation blamed fuel cost increases at Trans World Airlines for its $49.3m loss in the quarter.

At Eastern, traffic was stimulated by continued price cutting and special marketing efforts. The company flew 7.4bn revenue passenger miles in the quarter, up from 6.9bn. On average 63.53 per cent of its seats were filled compared with 64.55 per cent in the 1979 quarter, reflecting a sharp increase in the volume of services offered by Eastern.

Eastern said yesterday that its break-even load factor—the percentage of seats filled—was now 63 per cent.

Paine Webber sees second quarter loss

NEW YORK — Paine Webber, the securities trading house, expects to report a "material loss" for its second quarter because of a number of extraordinary costs.

The company said results for the second quarter ended March 31 will not be released until the middle of May, pending completion of a full securities count and other auditing procedures by its independent certified accountants.

The company also declared its regular quarterly dividend of 11 cents.

Mr. James W. Davant, chairman and chief executive, fered extraordinary costs resulting from operations difficulties during the period of record high stock exchange volume in January and February. This followed the merger of Blyth, Eastman Dillon into Paine Webber.

The company has established a reserve to cover potential losses arising from the operational difficulties, and the securities and auditing procedures have been undertaken to establish the value of the reserve.

Reuter

Growth in direct sales boosts Xerox results

BY JOHN MAKINSON IN NEW YORK

A STRONG rise in direct sales helped to increase the first quarter earnings of Xerox Corporation, the copier manufacturer, although margins were brought under pressure by the high cost of product development and adverse foreign exchange fluctuations.

Earnings increased from $137.4m to $148.4m, but this growth was outstripped by the 16 per cent increase in revenues to $1.86bn. The company said that direct sales were up by 24 per cent while rental and service revenue was up 12 per cent.

Xerox recently entered the retail market by opening the first of a series of "supermarkets for the office." The company will use the chain to market its new small copier, the 550. These developments should have an impact on sales and earnings later in the year.

The company said that 1980 should see continued growth in revenue and profits, despite the economic uncertainties. The group earlier forecast a decline in profit margins over the year.

During the first three months of the year, the number of copies made world-wide on Xerox leased and sold equipment was about 15 per cent higher, the company said.

3M again set for record year

BY OUR FINANCIAL STAFF

GROWTH SLACKENED at Mnnesota Mining and Manufacturng (3M) in the first quarter of ts current fiscal year. Net earnings totalled $167.3m or $1.43 a share, an increase of 10 per ct on last year's correspodng $152.1m or $1.30 a share, while sales advanced 15 per cent, from $1.3b to $1.5bn.

But the group, whose diverse activties range from abrasives, electrical products and advertising to health care and consumer prdoucts, is confidet of another record year.

Net earnings for the whole of 1979 were a record $563m or $5.59 a share on sales of $4.66bn.

Mr. L. W. Lehr, vice-chairman, said international results were excellent, with strong increases in unit volume.

Straight dollar bonds decline

BY FRANCIS GHILES

THE MAJOR sectors of the Eurobond markets have quietened down afte rmore than a week of frenzied activity. Straight dollar bond prices eased by as much as a full point yesterday morning but later recovered some of the lost ground to close about ⅜ per cent lower on the day.

Good demand enabled Dean Witter Reynolds to cut by ½ per cent to 14¾ per cent the coupon on the $50m seven-year offering for Portland General Electric NV. The issue has a final price of par.

A $15m 15-year convertible for Dynalectron USA was launched yesterday through Dillon Read. The borrower is paying a coupon of 9½ per cent and hte conversion premium is expected to be about 15 per cent.

In the hard currency sectors, prices of foreign D-Mark bonds were unchanged with Swiss franc bonds gaining ⅜ of a point on average. The EIB has arranged a SwFr 50m six-year private placement carrying a coupon of 7 per cent through group of banks led by UBS. Handelsbank, meanwhile, has completed a SwFr 25m private placement for Nichimo which is guaranteed by Daiwa Bank.

The borrower is paying a coupon of 7¼ per cent for five years. The lead manager is Handelsbank.

C. Itoh has arranged with Swiss Bank Corporation to extend the maturity on a bond it arranged in 1975 which was due for repaymentt his year. The company would have suffered heavy exchange losses had the bond been repayed on schedule. The initial coupon of 9 per cent has been reduced to 7¼ per cent and the bond's maturity extended for five years.

It was expected last night that Morgan Stanley would cut the indicated coupon of 14 per cent on the C$30m five-year issue it launched for Tordom last week. This results from good demand for the paper and the appearance last Monday of a C$50m issue for Canadian Imperial Bank of Commerce, through Hambros, which yields 13.64 per cent.

Sharp advance in earnings at Englehard

By Our Financial Staff

IN THE first quarter of the year, earnings at Engelhard Minerals and Chemicals have rocketed from $47.5m or 73 cents a share to $141.4m or $2.09, chiefly because of a sharp rise in earnings on raw materials sales at subsidiary Philipp Brothers, traditionally Engelhard's major profit source.

At the beginning of this year, analysts were predicting a slight decline in yearly earnings from $4.90 a share in 1979.

Engelhard said the significant advances of the first quarter were primarily attributable to Philipp Brothers division but added that precious metals operations showed substantial gains over 1979.

Philipp Brothers, which provided 90 per cent of revenues and 67 per cent of profits in 1978, is a major trader of more than 150 industrial raw materials on world markets. The Engelhard Industries division is a leading fabricator of precious metals.

This division also supplies catalysts for control of car exhaust emissions to the major car producers, where sales may be hurt by the slowdown in the U.S. motor industry.

The upsurge in commodity and metal prices in the early part of this year has transformed Engelhard's prospects for 1980.

Kraft helped by currency gains

BY OUR FINANCIAL STAFF

KRAFT, the diversified U.S. food group, has recovered from the 41 per cent fall in profits in the last quarter of 1979. Net income in the first three months of this year was up by a quarter at $65.1m, although if currency translation gains and company bond purchases are excluded the increase is pared back to 1.3 per cent.

The company said that this modest profits growth was attributable to the rapidly escalating cost of freight, energy and packaging materials, as well as a tightening of margins of Cheddar cheese within the U.S.

In North America both sales and profits were higher, with much the strongest performance coming from Canada.

Another company to have benefited from foreign currency adjustments is American Brands, the cigarettes, toiletries and engineering group. The adjustments added $8.9m to the group's first quarter income, which soared 73 per cent to $120m.

Early setback for broadcaster

BY OUR FINANCIAL STAFF

INCREASED PROGRAMMING costs, including coverage of the crisis in the Persian Gulf, are blamed for a fall in first quarter earnings at American Broadcasting Companies, operator of one of the three national television networks in the U.S. The board has repeated last April's forecast that earnings for the full year will be below the record $5.57 a share of 1979, but adds that 1980 is expected to be the second best year in company history.

Earnings dipped in the first quarter from $25.5m or 91 cents to $24.3m or 86 cents a share, although revenues increased from $451.6m to $546.9m.

Commenting on the results for the first quarter Mr. Leonard H. Goldenson, chairman, and Mr. Elton H. Rule, president said: "Our television network achieved record first quarter revenues. Our own television station group reported increased revenues and profits, despite a progressive softening of its sales environment as the quarter advanced.

"ABC Radio reported lower profits on higher revenues. ABC Publishing, with the inclusion of results from Chilton, which was acquired in the second quarter of 1979, achieved higher profits and was a significant contributor to the company's overall revenue growth in the quarter. First quarter 1979 results include losses from ABC Records prior to its sale in March, 1979.

"The operating losses of the travel network and the write-down of certain intangible assets associated with its acquisition significantly reduced first quarter 1980 pre-tax earnings."

Earnings are expected to fall this year because of increased economic uncertainty, more network competition, extraordinary news costs and costs associated with the travel network, the development of ABC Motion Pictures and ABC Video Enterprises.

The bulk of revenues—some 88 per cent in 1978—still come from broadcasting, with publishing turning in 5 per cent, recorded music 6.4 per cent and leisure attractions 1.3 per cent.

The group owns five television stations and 13 radio stations in New York, Los Angeles, Chicago, San Francisco, Detroit, Houston and Washington DC.

Until the beginning of this year, the outlook seemed bright with advertising showing favourable growth.

Sheikh raises bid for bank

By Our New York Staff

THE HEAD of a Middle East group of investors, Sheikh Kam al Adham, appears to have increased the price he is prepared to pay for Financial General Banc shares, the Washington bank.

Financial General said that some of its directors, who are also principal shareholders, met representatives of the Sheikh over the weekend and iscussed a figure of $29.50 a share, which would value the whole bank at about $200m. Previously, a figure of $25 had been mentioned.

The Middle East group already owns 18.6 per cent of Financial General common stock. The bank has resisted a full takeover and the Sheikh has said he will seek to replace members of the board at the annual meeting on April 30.

World Airways profits drive

BY FRANK GRAY

WORLD AIRWAYS has decided to launch a scheduled service between Boston and London on June 1 and has undertaken a major fares-cutting programme in the U.S. to improve its financial and operating performance following a disappointing financial result in 1979.

The company has reported a turnover of $165.7m for the year compared with $158.7m in 1978. Net income amounted to $11.3m or $1.16 per share as against $3.9m or 40 cents the previous year.

The Oakland, California-based airline said that the improvement in revenues was largely attributable to the sale of three Boeing 727 aircraft during the year. The company's performance was seriously harmed through the grounding of its DC-10 fleet and the effects of a four month Teamsters Union strike, which involved its flight and cabin crews and mechanics. The company owns seven DC-10s with orders on another two and an option to buy a third. It also operates four 747s and four DC-8s. The 747s are currently on lease to other operators.

World startled the U.S. commercial aviation community last week with a series of announcements of special fares under which it has offered one-way California - Hawaii scheduled flights for $69.99 and East Coast-Hawaii fares of $239.99. It also announced that it would charge $139.99 for transcontinental flights operating from Newark/New York and Baltimore/Washington to Los Angeles and Oakland.

As for the Boston-London service, Mr. W. A. Hardenstine, the company's senior vice-president, sales and marketing, said that the company planned a two-tiered fare of about $225 one-way economy and $500 one-way first class, but added that the exact fare had not yet been decided. The daily flights would originate four days a week in Newark and three days a week in Baltimore, with Boston serving as the transatlantic gateway point.

Rising costs hit Du Pont

BY OUR NEW YORK STAFF

RISING RAW material costs have squeezed the first quarter margins of Du Pont, the largest chemicals company in the U.S., and have caused a slight fall in earnings. Net income slipped to $244m from $248m, while sales grew to $3.6bn from $3bn. This represented a 2 per cent increase in volume.

Commenting on the fall in net profit margins from 8.4 per cent to 6.9 per cent, Du Pont's president, Mr. Edward G. Jefferson, said "it has not been feasible to increase selling prices sufficiently to offset the very sharp rise in costs of energy, petrochemical raw materials and precious metals."

The cost of petrochemical materials was 66 per cent higher than in the first quarter of last year and the rise in the silver price had an adverse impact on the photo products division.

AMERICAN QUARTERLIES

ACME-CLEVELAND

Second quarter	1980 $	1979 $
Revenue	111.1m	92.1m
Net profits	4.89m	4.59m
Net per share	1.15	1.03

AMERICAN CYANAMID

First quarter	1980 $	1979 $
Revenue	830.0m	753.3m
Net profits	38.0m	40.7m
Net per share	0.79	0.85

BECTON DICKINSON

Second quarter	1980 $	1979 $
Revenue	237.4m	203.5m
Net profits	18.6m	15.9m
Net per share	0.90	0.77
Six months		
Revenue	449.2m	386.2m
Net profits	35.2m	29.3m
Net per share	1.70	1.43

BORG-WARNER

First quarter	1980 $	1979 $
Revenue	680.1m	631.5m
Net profits	35.9m	35.2m
Net per share	1.68	1.65

BURNDY

First quarter	1980 $	1979 $
Revenue	67.1m	55.9m
Net profits	7.07m	5.03m
Net per share	1.14	0.81

CAPITAL CITIES COMMUNICATIONS

First quarter	1980 $	1979 $
Revenue	106.7m	89.8m
Net profits	15.11m	11.97m
Net per share	1.14	0.87

CINCINNATI MILACRON

First quarter	1980 $	1979 $
Revenue	184.9m	161.6m
Net profits	12.3m	10.4m
Net per share	0.82	0.69

COCA-COLA BOTTLING N.Y.

First quarter	1980 $	1979 $
Revenue	125.5m	110.5m
Net profits	1.87m	1.88m
Net per share	0.09	0.09

CONE MILLS

First quarter	1980 $	1979 $
Revenue	189.4m	167.98m
Net profits	12.82m	8.65m
Net per share	2.22	1.49

CONSOLIDATED EDISON N.Y.

First quarter	1980 $	1979 $
Revenue	978.0m	810.0m
Net profits	80.2m	80.3m
Net per share	1.11	1.12

COX BROADCASTING

First quarter	1980 $	1979 $
Revenue	69.5m	55.6m
Net profits	9.23m	7.39m
Net per share	1.37	1.10

DRAVO

First quarter	1980 $	1979 $
Revenue	210.6m	187.4m
Net profits	3.62m	7.55m
Net per share	0.25	0.55

EATON CORPORATION

First quarter	1980 $	1979 $
Revenue	844.9m	864.4m
Net profits	49.1m	44.8m
Net per share	1.86	1.72

FRUEHAUF

First quarter	1980 $	1979 $
Revenue	587.9m	607.8m
Net profits	9.49m	23.17m
Net per share	0.78	1.91

GIDDINGS AND LEWIS

First quarter	1980 $	1979 $
Revenue	79.9m	54.2m
Net profits	7.77m	5.54m
Net per share	1.23	0.91

HARVEY HUBBELL

First quarter	1980 $	1979 $
Revenue	103.2m	89.0m
Net profits	7.57m	6.62m
Net per share	1.23	1.07

HUGHES TOOL

First quarter	1980 $	1979 $
Revenue	238.8m	166.4m
Net profits	23.97m	14.36m
Net per share	1.03	0.67

INTERNATIONAL RECTIFIER

Third quarter	1980 $	1979 $
Revenue	40.9m	31.8m
Net profits	2.45m	1.78m
Net per share	0.89	0.67
Nine months		
Revenue	113.6m	89.8m
Net profits	6.69m	4.31m
Net per share	2.46	1.62

KELLOGG

First quarter	1980 $	1979 $
Revenue	513.6m	457.9m
Net profits	50.0m	47.5m
Net per share	0.65	0.62

KENNAMETAL

Third quarter	1980 $	1979 $
Revenue	90.4m	70.9m
Net profits	10.25m	10.11m
Net per share	0.85	0.85
Nine months		
Revenue	234.1m	192.6m
Net profits	27.71m	23.24m
Net per share	2.31	1.95

JONATHAN LOGAN

Fourth quarter	1980 $	1979 $
Revenue	100.0m	97.6m
Net profits	†1.46m	601,000
Net per share	†0.28	0.12
Year		
Revenue	426.1m	400.7m
Net profits	5.79m	7.26m
Net per share	1.11	1.39

† Loss

LTV

First quarter	1980 $	1979 $
Revenue	1.99bn	1.98bn
Net profits	26.4m	43.6m
Net per share	0.86	1.52

MELVILLE CORPORATION

First quarter	1980 $	1979 $
Revenue	434.9m	369.5m
Net profits	7.15m	6.3m
Net per share	0.28	0.25

NATIONAL CAN

First quarter	1980 $	1979 $
Revenue	288.1m	239.9m
Net profits	9.65m	5.62m
Net per share	0.95	0.58

NORTHWEST INDUSTRIES

First quarter	1980 $	1979 $
Revenue	657.3m	587.6m
Net profits	30.5m	34.1m
Net per share	0.98	1.10

NORTHWEST BANCORP

First quarter	1980 $	1979 $
Net profits	27.08m	25.34m
Net per share	1.05	0.98

OMARK INDUSTRIES

Third quarter	1980 $	1979 $
Revenue	67.2m	53.8m
Net profits	6.54m	15.7m
Net per share	1.86	1.48
Nine months		
Revenue	194.0m	156.1m
Net profits	20.46m	16.26m
Net per share	5.84	4.65

RYAN HOMES

First quarter	1980 $	1979 $
Revenue	98.0m	93.8m
Net profits	3.77m	2.72m
Net per share	0.57	0.41

JOS. SCHLITZ BREWING

First quarter	1980 $	1979 $
Revenue	241.4m	242.7m
Net profits	8.0m	†1.6m
Net per share	0.28	—

† Loss

SHELL CANADA

First quarter	1980 C$	1979 C$
Net profits	89.2m	46.1m
Net per share	0.84	0.42

SOUTHERN CO.

First quarter	1980 $	1979 $
Revenue	795.9m	712.7m
Net profits	63.03m	38.78m
Net per share	0.42	0.27

SOUTHERN PACIFIC

First quarter	1980 $	1979 $
Revenue	678.6m	596.1m
Net profits	8.93m	33.74m
Net per share	0.33	1.26

SPRINGS MILLS

First quarter	1980 $	1979 $
Revenue	220.3m	180.3m
Net profits	8.86m	8.02m
Net per share	1.00	0.91

STERNDENT

First quarter	1980 $	1979 $
Revenue	60.5m	51.6m
Net profits	1.33m	1.19m
Net per share	0.60	0.54

TEXACO CANADA

First quarter	1980 C$	1979 C$
Revenue	834.7m	632.2m
Net profits	93.2m	48.1m
Net per share	2.91	1.42

THIOKOL CORPORATION

First quarter	1980 $	1979 $
Revenue	155.0m	135.5m
Net profits	9.58m	7.31m
Net per share	1.66	1.26

TRANSAMERICA

Third quarter	1980 $	1979 $
Revenue	1.08bn	938.8m
Net profits	58.8m	58.1m
Net per share	0.90	0.88

TRANSWORLD CORPORATION

First quarter	1980 $	1979 $
Revenue	1.09bn	858.3m
Net profits	†49.3m	†47.8m
Net per share	†3.40	†3.20

Loss

FT INTERNATIONAL BOND SERVICE

The list shows the 200 latest international bond issues for which an adequate secondary market exists. For further details of these or other bonds see the complete list of Eurobond prices published on the second Monday of each month. Closing prices on April 22

U.S. DOLLAR STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Alcoa of Australia 10 89	60	87¾	87⅞	−0⅛	+2⅞	12.32
Alex Howden XW 9½ 91	30	86	88	0	0	16.03
Australian Res. 9⅝ 84	30	91½	91⅝	−0⅝	+3⅜	12.30
Avco O/S Cap. 10⅞ 87	40	81½	82	−0⅛	+5⅛	14.68
Beneficial Fin. 9¾ 87	100	88½	88¾	−1⅛	+4⅛	12.21
CECA Grad. Rate 12 86	100	92¼	92½	−0⅛	+0⅝	13.75
CECA 11¾ 90	60	91	92	0	+2	13.20
Canadian Pacific 9¾ 89	50	88¾	89¼	−0⅛	+4⅛	11.78
Carter Hawley 9¾ 86	50	89½	90	−0⅜	+5⅜	12.18
Comalco Inv. E. 10¼ 91	40	87⅝	88⅛	−1⅛	+3	12.28
Continental Grp. 9⅝ 86	100	89	89½	−0⅛	+4⅛	12.18
Dome Petroleum 10 94	50	81¾	82¼	−0½	+2¾	12.79
Dominion Bridge 10¼ 84	30	91⅝	92⅛	−0⅜	+2⅜	12.87
EIB 11¾ 92	80	91½	92	−0⅞	+2⅞	13.14
EIB 10.15 99	100	†83½	85	−0⅛	+4½	12.65
Ekoortfin 11⅛ 87	50	94¼	94¾	−0⅛	+2⅝	12.51
Export Dv. Cpn. 9¼ 84	100	91	91½	−0½	+2½	12.21
Export Dv. Cpn. 9⅝ 84	150	92⅜	92⅞	−0⅛	+3⅛	11.98
Finland 9⅝ 89	100	85⅛	85⅝	−0⅛	+3⅛	12.70
GTE Finance 9¾ 89	55	86⅜	86⅞	−0½	+2¾	12.24
GMAC O/S Fin. 11 84	100	87⅞	88⅜	−0½	+3⅜	12.15
GMAC 9¾ 86	100	94⅞	95⅜	−0½	+2⅞	12.40
Gould Int. Fin. 9⅞ 85	50	90⅛	90⅝	−1⅛	+2¾	12.41
ITT Antilles 9½ 89	75	86⅛	86⅝	−0⅛	+4½	12.06
Kennecott Int. 9½ 86	100	87⅛	87⅝	0	+2⅞	12.59
Manitoba 9½ 89	75	85½	86	−0¼	+4¾	12.20
Michelin 10 94	125	86½	87	−0¼	+2⅞	11.96
Nat. Des. Telecm. 9½ 86	100	89⅛	89⅝	−0¼	+4⅜	12.03
New Brunswick 9⅞ 94	75	83½	84	0	+4	12.23
Newfoundland 10 94	50	88⅜	88⅞	−0⅛	+3⅛	11.73
Norges Komm. 9⅞ 99	100	84	84½	+0⅛	+4⅜	12.34
Norway 9½ 84	150	92⅞	93⅛	+0⅛	+3½	11.82
Nova Scotia Pwr. 9¾ 89	50	86⅞	86⅜	−0⅛	+3¾	12.32
Occidental Fin. 10¾ 84	50	91	91½	−0⅛	+0½	13.12
Pennwalt O/S F 9¾ 84	25	†93⅛	93⅝	−0⅛	+3⅜	11.86
Pepsico Cap. 9¾ 84	100	91½	92¼	−0⅛	+3¼	11.94
Quebec Hydro 10 99	75	81½	82	−1⅛	+1⅛	12.55
Sears Roebuck 9 82	150	93½	94	−0¼	+1¼	13.03
Statoil 9⅝ 89	100	87¾	88¼	−0⅛	+3	11.80
Sweden 9¾ 89	100	88½	88⅝	−0½	+3⅜	11.92
Sweden 9½ 86	200	†91	91½	+1⅛	+4½	11.90
Sweden 9¼ 84	100	92⅞	93¼	−0¼	+3½	11.88
Unilever NV 9¾ 87	100	87⅞	87⅞	−0¼	+4¼	11.88
Warner-Lambert 9 84	100	89⅝	90⅛	−0⅜	+2⅝	12.20

Average price changes... On day −0⅜ on week +3¼

DEUTSCHE MARK STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Australia 8½ 90	250	90¼	91	−0⅛	+0¼	9.80
Asian Dev. Bk. 7¼ 89	100	86⅞	87⅝	−0¼	+2¾	9.36
African Dev. Bk. 8 87	100	98¾	99	0	+1	8.33
Barclays O'seas 6¾ 89	100	88¾	89¼	−0¼	+3¼	8.59
[illegible] 7⅜ 87	100	93	94	−0⅛	+1⅛	9.07
[illegible] 8¼ 95	100	93½	94½	+0⅛	+2½	8.88
Brazil 8 87	150	91⅝	92⅜	+1	+3⅛	9.56
CECA 7 91	150	88½	89¼	−0⅛	+1⅞	8.61
Council of Eur 7¼ 89	100	89⅞	90⅜	−0¼	+1¼	8.86
Denmark 7⅞ 86	100	93⅜	94⅜	−0¼	+1½	9.22
Denmark 8¼ 92	100	93½	94½	−0½	+2⅜	9.09
[illegible] 7⅞ 94	225	93⅜	94⅜	−0⅛	+3⅜	8.60
EIB 7½ 89	200	92¼	92⅞	−0⅜	+3	8.72
Finland Rep. of 8 86	150	95⅛	96⅛	+0⅜	+3⅛	8.88
Kobe, City of 7½ 89	150	88½	88⅞	−0½	+1	8.97
Neder. Gasunie 8 86	100	98½	99½	+3¼	+4⅞	8.19
New Zealand 7⅝ 87	200	91⅞	92⅝	+0½	+2¾	8.57
Norges Komm. 7¾ 91	150	92⅝	93⅝	0	+2¼	8.73
Norway 7½ 85	250	97¼	98	−0⅛	+1⅞	8.11
OKB 7⅜ 89	100	89⅜	90⅛	−0½	+3¼	9.02
Oslo, City of 8¾ 90	80	97⅜	98⅜	−0⅞	+2⅜	9.04
World Bank 7¾ 91	400	91⅜	92½	−0⅛	+1⅜	8.86
World Bank 7⅞ 90	250	92⅜	93½	−0⅛	+1¼	8.95

Average price changes... On day 0 on week +2⅛

SWISS FRANC STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Argentina 5½ 89	80	89¾	90¼	+0¼	+1⅜	7.00
Aumar 5 89	60	91	91½	−0⅛	+3	6.28
Australia 3⅝ 89	250	88¾	89¼	0	+1	5.19
Bergen, City of 4½ 91	40	87½	88	0	+1⅛	6.30
BNDE 5 89	75	84½	85	+1	+3½	7.32
BMW Overseas 4¾ 91	100	91	91½	0	+3⅛	5.28
Caisse Nat. Tele. 4⅝ 89	100	90½	91	−0⅛	+0¼	5.68
CCCE 5¾ 90	100	99½	100	+0⅞	+1⅞	5.78
Copenhagen 4½ 91	60	85	85½	+0¼	+5⅛	6.35
Council of Eur. 5 89	100	90	90½	+0¼	+1⅛	6.39
EIB 4½ 91	100	89¾	90¼	+0⅛	+4⅜	5.73
EIB 4½ 84	100	84½	85	0	+1½	5.99
Elet. de France 4½ 89	100	91¼	91¾	−2¾	+2¾	5.57
GZB 4¼ 89	100	87½	88	+0¼	+2½	5.97
Hilti 4½ 91	35	90½	91	+0¼	+1½	5.34
Int.-Amer. Dev. 4½ 89	100	88¼	86¾	+1	+2½	6.47
Jutland Tele. 5½ 90	50	100	100¼	+0¼	+2¾	5.48
Malaysia 5 89	80	87½	88	+0½	+0¼	6.79
Nippon Tel. & T. 4¼ 89	100	92	92½	0	+1½	5.31
Nordic Bank 5 89	45	94	94½	+1⅛	+3	5.82
Norges Komm. 4¾ 91	100	86	86½	−1⅛	+2½	6.07
OKB 3¾ 91	100	82	82½	+0¼	+4⅛	6.01
OKB 4⅝ 91	100	86½	87	0	+2½	6.00
OKB 6 90	100	100¾	101	+0¼	+1⅞	5.88
Oslo, City of 4⅝ 91	100	86	86½	+1	+3	6.07
Shikoku El. Pwr. 4¾ 89	100	94	94½	+0½	+0¼	5.55
Steweag 4¾ 91	60	90½	91	−0½	+2¾	5.90
Voest-Alpine 4¾ 89	90	94½	95	+2	+3½	5.50
World Bank 4⅝ 89	100	91	91½	+0⅜	+3⅜	5.87
World Bank 4½ 89	150	88½	89	+0⅛	+4¼	5.97
World Bank 4⅝ 91	100	87	87½	+1	+3¾	6.20

Average price changes... On day +0⅜ on week +2½

YEN STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Australia 5.6 85	30	85¾	86⅝	+0⅜	+2⅜	10.55
Australia 6½ 88	20	78½	79½	+0⅛	+5½	10.48
EIB 7⅜ 89	12	87⅞	88⅝	+0⅛	+5⅜	9.61
Finland 5.6 83	10	85	86	0	+3⅜	10.73
Finland 6.8 88	10	79	80	0	+5	10.72

Average price changes... On day +0⅜ on week +4⅛

OTHER STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Avco Fin. 10¼ 86 C$	25	78½	79½	+0¼	+1⅛	15.88
Bell Canada 10¾ 86 C$	60	88⅞	89⅜	+1½	+3	13.33
Cr. Foncier 10⅝ 84 C$	30	86	87	+0½	+0¼	14.70
Ex. Dev. Cpn. 10 84 C$	50	89½	89⅜	+1⅜	+2	13.56
Fst. Can. Inv. 10 84 C$	60	88½	88⅝	+1½	+1⅞	13.92
Hudson Bay 10½ 89 C$	60	84¾	85¼	+1	+3¾	13.48
Quebec 10¾ 86 C$	50	86¾	88	+1	+3½	13.52
R. Bk. Canada 10 86 C$	40	86⅞	87⅝	+0¼	+0¼	13.28
R. Bk. Canada 10 94 C$	40	79¾	80½	+0⅛	+2⅞	13.22
Copenhagen 8¾ 91 EUA	20	92¼	93½	0	+4⅜	9.80
M. Bk. Dnmk. 9 91 EUA	25	92¾	94	0	+2⅛	9.97
SOFTE 8⅜ 89 EUA	40	83	84½	+0⅛	+0⅞	11.24
U. Bk. Nrwy. 9½ 90 EUA	18	96½	97¼	0	−0⅛	9.96
Algemene Bk. 8¾ 84 Fl	75	96¼	96¾	+0¼	+2⅛	9.23
Ned. Gasunie 8¾ 84 Fl	50	96⅛	96⅝	0	+1⅛	9.83
Ned. Middbk. 8¾ 84 Fl	75	94⅞	95⅜	0	+1⅛	9.79
Norway 8⅜ 84 Fl	100	95¼	95¾	0	+2⅛	9.68
Norway 8¼ 84 Fl	100	94⅞	95⅛	+0⅛	+1⅞	9.62
Philips Lamps 8⅝ 84 Fl	75	95⅝	95⅞	−0⅛	+1⅛	9.72
Air France 11 84 FFr	120	92¾	93½	+0⅛	−0⅛	13.11
CECA 14⅛ 86 FFr	150	102	103⅛	+0½	+0⅛	13.47
Euratom 9¾ 87 FFr	150	83⅛	83⅞	0	−0⅛	13.48
Finland 11 84 FFr	80	93	93¾	−0½	+0⅛	12.99
Finland 11½ 89 FFr	70	87¼	88⅛	0	−0⅛	13.81
Gaz de France 11 84 FFr	150	92¾	93½	−0⅛	−0⅛	13.66
IBM France 11⅞ 84 FFr	120	93⅜	94	0	−0⅜	13.76
Renault 9¾ 85 FFr	100	83½	84⅛	+0⅛	−1⅛	14.28
Saint-Gobain 9¾ 86 FFr	130	83⅜	84⅛	0	−1	13.88
Solvay et Cie 9¾ 87 FFr	125	81¼	82	0	+1⅛	14.04
Citicorp O/S 13½ 90 £	50	93¼	94	−0½	+0⅛	14.74
EIB 11½ 91 £	25	87¼	88	0	+1⅛	13.71
Finance for Ind. 13 91 £	15	92	92¾	−0⅛	+1⅛	14.41
Fin. For Ind. 12½ 89 £	30	88⅛	89⅛	−0⅛	−0⅛	14.79
Fin. for Ind. 14½ 88 £	20	98⅛	98⅞	−0⅛	+0⅞	14.81
Gen. Elec. Co. 12½ 89 £	50	90⅞	91⅜	−0½	+0⅛	14.28
Indonesia 8¾ 91 KD	7	†93	93½	0	0	9.75
Mitsubishi 7½ 84 KD	10	†89⅜	90⅜	0	0	10.46
Norges Kom. 7½ 89 KD	12	†93½	93⅞	0	0	8.54
Occidental 8¾ 91 KD	7	†90¾	90¾	0	0	9.68
Akzo 9¾ 87 LuxFr	500	89½	90½	0	+2⅛	11.27
Euratom 8 87 LuxFr	500	85⅛	86⅛	0	+1⅞	11.06
Euratom 9¾ 88 LuxFr	500	96⅜	97⅛	0	+2⅞	10.26
EIB 9¾ 88 LuxFr	600	95¾	96¾	0	+3⅜	10.46
Volvo 9¾ 87 LuxFr	500	94⅞	95⅞	0	+3⅜	10.64

FLOATING RATE NOTES	Spread	Bid	Offer	C.dte	C.cpn	C.yld
Allied Irish Bk. 5¾ 87	0¼	97	97½	2/7	15½	15.55
Banco di Roma Int. 6 87	0¼	98⅞	99¼	28/4	15⅝	15.93
Bank of Ireland 5¾ 89	‡0¼	98	98½	21/5	16⅛	16.41
Bank of Tokyo 5¾ 89	‡0⅛	97¾	97¾	25/4	14.56	14.94
Barclays O/S Inv. 5 90	0¼	96⅞	97⅜	13/8	14¼	14.67
Bergen Bk. A/S 6 89	‡0⅛	97	97½	29/5	17¼	17.74
Bque. Indo Suez 5¾ 89	0¼	97⅛	97⅞	11/7	14.69	15.06
Citicorp O/S F. 6 94	‡0⅛	99¼	99⅝	8/8	18.81	18.91
Citicorp O/S F. 83	§‡0	99	99½	23/5	16.06	16.18
Citicorp O/S F. 84	‡0	99⅛	99⅝	30/5	16.94	17.04
C. Itoh 5¾ 87	0¼	99⅛	99⅝	18/9	19.44	19.55
Co-operative Bk. 6 86	0⅛	97⅝	98⅛	15/5	15.06	15.39
Creditanstalt 5½ 91	§‡0¼	98⅝	99⅛	14/6	18.44	18.65
CNT 5¾ 86	§0¼	99½	99¾	16/10	18⅛	18.22
GZB 5½ 89	‡0⅛	97⅝	98⅛	1/5	14⅝	14.92
Jugobanka 8 89	0⅞	91⅞	92¾	23/5	16	17.34
Ind. Bank Japan 5¾ 87	0¼	98⅜	99¼	15/10	18¾	18.94
LTCB Japan 5¾ 85	0¼	97⅝	98⅛	13/6	14¼	14.58
LTCB Japan 5½ 89	0¼	96⅝	97⅛	7/6	14.19	14.65
Mfrs. Han. O/S 5¾ 94	‡0⅛	98¾	99¼	30/5	17⅛	17.30
Midland Intl. Fin. 5 89	0¼	98⅜	98⅞	20/6	15	15.15
Nacional Fin. 6¾ 86	0¼	97¾	98¼	25/7	14.69	14.99
Nat. West. 5¾ 94	§0⅛	98⅛	98⅞	11/10	18⅜	18.58
Nippon Credit 6⅛ 86	0¼	96	96½	12/7	14.44	15.00
Nippon Credit 5¾ 87	‡0⅛	97⅜	97⅞	6/5	14.69	15.04
Royal Bk. Scot. 5¾ 94	§‡0⅛	99	99½	11/7	19½	19.65
Soc. C. d Bque. 6½ 87	0¼	99⅝	100⅛	3/10	20.06	20.08
Sogenal 5¾ 89	§0⅛	97	97½	13/7	14.44	14.85
Standard Chart. 5¾ 90	0¼	98½	99	6/9	17¼	17.47
Sweden 8¾ 91	‡0⅛	†97¼	97¾	18/10	18⅝	19.10
TVO Pwr. 9 91 (D-lock)	0¼	96⅛	96⅝	24/5	15.31	15.86
Williams & Glyn 5¾ 91	0¼	98	98½	14/6	18½	18.64
Bq. E. d'Alg. 4¼ 89 SF	0⅛	89	89½	19/6	6.69	7.49

Average price changes... On day 0 on week +0⅛

CONVERTIBLE BONDS	Cnv. date	Cnv. price	Bid	Offer	Chg. day	Prem
AGA Akt'bolag 7⅜ 89	10/79	145	†104	105	0	−12.27
Ajinomoto 7¼ 95	2/80	918	90⅝	91⅝	−0⅛	1.50
Alco Int. Fin. 9½ 94	1/80	40	87	88	+0⅞	32.68
Asahi Optical 7 94	11/79	806	87	88	0	13.28
Canon 6¾ 94	8/79	570	96⅛	97⅛	−0½	4.78
Ciba-Geigy O/S F. 4 94	9/79	675	†71	72	−0¼	4.62
Credit Suisse 4¾ 93	10/79	1325	90½	92	−0¼	1.15
Daiei Inc. 6½ 94	11/79	1020	92⅞	93⅞	+0⅞	43.19
Enserch Fin. 5½ 94	7/80	30.25	98	99¼	−1⅛	12.61
LPC Internatnl. 8 89	9/79	23.33	†92	93	−1⅛	33.79
Meidensha Elec. 7 94	12/79	210	92¾	93¾	0	20.63
Mitsubishi Cp. 6½ 94	10/79	609	114⅜	115⅞	+0¼	13.55
Nippon Seiko 7¼ 94	12/79	399	102½	103½	−0¼	−2.69
Nitto Elec. Ind. 6 94	7/79	736	69	70½	+0½	6.29
Toshiba Cpn. 7¼ 94	10/79	198	90⅞	91⅝	−0½	5.97
Union Bk. Switz. 5 89	2/80	125	88⅝	89⅝	−0⅛	−8.58
Fujitsu 5 84 DM	7/79	475	94⅛	95⅛	+0¼	17.97
Kansai Elec. 4 84 DM	4/79	1234	84¾	85¾	+0¼	60.88
Tokyu Ld. Cp. 4 86 DM	4/79	493	74½	75½	−0¼	57.04
Uny Co. 6½ 85 DM	11/79	1071	90¼	91	0	49.55

* No information available—previous day's price.
† Only one market maker supplied a price.

Straight Bonds: The yield is the yield to redemption of the mid-price: the amount issued is in millions of currency units except for Yen bonds where it is in billions. Change on week=Change over price a week earlier.

Floating Rate Notes: Denominated in dollars unless otherwise indicated. Coupon shown is minimum. C.dte=Date next coupon becomes effective. Spread=Margin above six-month offered rate (‡ three-month; § above mean rate) for U.S. dollars. C.cpn=The current coupon. C.yld=The current yield.

Convertible Bonds: Denominated in dollars unless otherwise indicated. Chg. day=Change on day. Cnv. date=First date for conversion into shares. Cnv. price=Nominal amount of bond per share expressed in currency of share at conversion rate fixed at issue. Prem=Percentage premium of the current effective price of acquiring shares via the bond over the most recent price of the shares.

Akzo results continue recovery in first quarter

BY CHARLES BATCHELOR IN AMSTERDAM

AKZO, THE Dutch chemicals and fibres group, expects a "satisfactory result" in 1980 on the basis of business levels in the first few months. This follows a sharp recovery in profits last year.

The company said it intended to relate "more closely" its dividend payment to profits. This could lead in future to greater fluctuations in the annual payout, Akzo warned. It proposes paying Fl 2.40 per share for 1979 having last paid Fl 4 in 1974.

The "hard" element in last year's net profit of Fl 230m ($113m) was Fl 80m with the balance from stock profits and other incidental items, the company points out. Akzo will relate dividends to these "hard" profits.

The company describes the recovery in profits last years as "satisfactory" in its annual report. Turnover rose 13 per cent to Fl 12bn. Higher volume of sales accounted for 5 per cent of the rise and price increases the rest.

The increase in volume sales allowed a better use of capacity. Sales were favourably influenced by stock building by customers. Increased oil prices led to a rise of Fl 190m in the valuation of stocks.

Akzo believes it is in a "much stronger" position after its restructuring of the past five years. If it had not cut its workforce by 21,000 to 83,000 it would have incurred a loss of Fl 800m last year.

It has restricted its activities to selected markets in Western Europe, North America, Japan and Brazil. It expects to increase fixed asset investment by at least Fl 100m to Fl 560m this year. Projects worth Fl 890m were approved last year compared with Fl 449m in 1978.

● Volker Stevin, the dredging and construction group, proposes to maintain its dividend for 1979 despite a fall in profit. Volker will pay a cash dividend of Fl 6 per share out of net profits, which fell 6 per cent to Fl 80.5m ($39m). Sales were down 7 per cent to Fl 2.6bn.

The results were adversely affected by the losses of Netherlands Offshore Company (NOC) in which it held a 40 per cent stake with two other construction groups, Bos Kalis Westminster and Hollandsche Beton Group. NOC has been wound up and its assets sold.

Heavier losses for Kleber

BY TERRY DODSWORTH IN PARIS

THE RECOVERY hopes at Kleber-Colombes, the French tyre company which severed its connections with Semperit of Austria early last year, took a sharp knock from raw material price increases during 1979.

Consolidated losses rose to FFr 103.5m ($24m) compared with FFr 98m in 1978, while turnover rose 13.2 per cent to FFr 2.59bn. Depreciation amounted to FFr 101.2m.

The results follow signs in the first half of 1979 that Kleber's restructuring plan was paying off, with losses reduced from FFr 49.6m to FFr 44.7m. Kleber says, however, that it has since been unable to recoup the increase in its material costs by higher prices on its tyres, and this has been aggravated by the expenses on restructuring.

About 50 per cent of the shares in Kleber are believed to be owned by Michelin, the highly profitable giant of the French tyre industry, which interferes very little in the running of Kleber.

Michelin helped in the rescue plan for Kleber after the ending of its co-operation agreement with Semperit by putting up a FFr 200m loan. This aid was backed by a FFr 100m bank facility and the sale of the company's research centre and Paris head office.

In a further effort to reduce costs, Klever also cut its labour force and closed down one of its factories to try to get back into profits by 1981.

Sales have risen 17 per cent in the first three months of this year. But a substantial part of this can be attributed to inflation and Gleber has not given a forecast of the profit and loss account.

The company has received a boost, however, from the recent decision of the safety authorities in favour of its V-10 and V-12 tyres, which have been under serious attack for several months from the Federation of Consumers' Associations.

While the federation has questioned the safety of these tyres, safety officials said that they would not be withdrawn from the market. Tests have shown no evidence of a manufacturing defect in the tyres, the authorities said.

Kleber's parent company losses last year amounted to FFr 93.6m after a depreciation charge of FFr 54m. Exports of FFr 2.13bn accounted for 38.4 per cent of sales, an increase of 12 per cent.

Sandoz posts first quarter gains

BY JOHN WICKS IN BASLE

SALES AND profits of Sandoz, the Swiss chemical company, improved in the first three months of this year. All product sectors increased from a year earlier, with earnings rising at least as fast as turnover, Dr. Yves Dunant, chairman of the Basle-based parent, Sandoz AG, said.

Last year, business was "satisfactory in the light of economic conditions," he added. Turnover rose 3.4 per cent to SwFr 4.44bn ($2.56bn) despite a 4 per cent average currency appreciation.

Group cash flow rose 5.4 per cent in 1979 to SwFr 432m and group profits 10.9 per cent to SwFr 173m. From parent-company net earnings of SwFr 80.8m, up 2.1 per cent, the board has already announced that it will recommend payment of an unchanged 26 per cent dividend.

After a 3.6 per cent improvement in pharmaceutical sales in 1979 to SwFr 2.14bn, Sandoz expects to consolidate its strong market position with new products.

Growth potential for dyestuffs, sales of which recovered last year rising 8.5 per cent to SwFr 1.17bn, is limited due to to probable stagnation in the textile industry. However, further expansion of the dyestuffs plant in Martin, South Carolina, will be the biggest single capacity investment in 1980.

Sales o fthe group's seeds division, whose operations are concentrated in the U.S., are developing well after a slight decrease—due to exchange rate changes—of 2.1 per cent to SwFr 376m last year.

In the agricultural chemicals sector, the group anticipates that growth will continue at existing rates: turnover rose 9.9 per cent to SwFr 289m last year.

In the foods division, where turnover fell 7.4 per cent last year to SwFr 464m because of the removal from consolidated totals of the Nigerian Ovaltine subsidiary, Sandoz expects an acceleration in sales of Ovaltine and similar products and a strengthening of its market position in dietetic foods.

Dr. Dunant said the Sandoz bid of $37 per share for McCormick, the U.S. spices company, remained the basis for any further acquisition negotiations.

Sachs board ousts chief executive

By Roger Boyes in Bonn

THE SUPERVISORY board of Fichtel und Sachs, the major German clutch manufacturer, effectively ousted the group's chief executive, Herr Walter Trux, by refusing to renew his four-year contract after it expires later this year. The company gave no reason yesterday, saying only that the move was agreed by over two-thirds of the 16-member board. It was clear, however, that the action followed policy disagreements.

Herr Trux, formerly of IBM has come in for considerable criticism recently for not reducink quickly enough the company's dependence on the motor industry. He has nonetheless achieved a good deal of success in diversification and has iniated a range of environmental engineering and energy saving products that will come on to the market in the 1980s. Moreover, over the past four years sales turnover has increased by 50 per cent, with parent company turnover last year reaching DM965m ($536m) and group sales totalling over DM1.6bn. First quarter order books are healthy and further sales and profit increases are forecast for the year.

Nokia tops up dividend as profits improve

BY LANCE KEYWORTH IN HELSINKI

NOKIA, ONE of the largest privately owned industrial conglomerates in Finland, is raising its dividend to 10 per cent from 8 per cent following increased profits.

Consolidated turnover rose 24 per cent to FM 3.2bn ($839m), of which the parent company accounted for FM 2.5bn. Exports were worth FM 1.2bn, and if the sales of overseas subsidiaries are added, the total for international activities was FM 1.6bn, or 46 per cent of total sales.

Mr. Kari Kairamo, president and chief executive, stressed in the annual report that the strong growth of exports "is highly significant for the future development of the group."

Net earnings of FM 31.89m ($8.61m) compare with FM 29.38m in 1978, after taxes and full permissible depreciation. Depreciation is booked at FM 107m, while depreciation computed on current cost principles would have been about FM 153m. Long-term debt at the end of 1979 was FM 721m.

Nokia's prospects in 1980 are described as "satisfactory." Investment expenditure will rise to FM 300m, compared with the previous peak of FM 275m in 1975 and FM 144m in 1978.

Rinascente moves back to profit

BY RUPERT CORNWELL IN ROME

RINASCENTE, one of Italy's largest store groups, returned to profit last year, for the first time since 1974. It is planning to pay a dividend of L600 per share, the first such distribution for six years.

The company, in which the financial group Sogef, the Agnelli controlled Istituto Finanziario Industriale (IFI) and the Mediobance merchant bank each have substantial interests, reported 1979 net earnings of almost L12bn ($13.8m) compared with a loss of L274m in 1978, and one of L5bn in 1977.

Sales climbed by a fifth to L910bn from L759bn, and the signs are that the buoyant trend continued into early 1980. In January and February turnover rose to L146bn, despite the tradional seasonal slackness.

New Rorento payout policy

BY OUR AMSTERDAM CORRESPONDENT

RORENTO, THE Dutch fund which invests in fixed interest securities, is to scrap cash dividends in favour of capital dividends in an attempt to improve the attractiveness of its shares.

The fund will pay profits into a general reserve and so increase the intrinsic value of its shares. Shareholders who wish to take a dividend can do so by selling a percentage of their holding.

The six-year-old fund, which is based in Curacao, proposes thsi change in order to avoid modifications to the tax treatment of offshore funds in the Netherlands. The Dutch Government plans ot raise, retroactively from January, the tax on offshore fund dividends. The absence of capital gains tax in the Netherlands makes the proposed new system of dividends fiscally more advantageous to investors.

The announcement of the proposed increase in tax and the decline in bond prices led to a sharp fall in the number of Rorento shares on issue in the year ended February. This led to a net decline of 7.4m issued shares to 21m, while assets fell from Fl 3.8bn ($1.6bn) to Fl 2.2bn.

An "assessment of energy developments" led Rorento to make a fundamental change in investment policies, moving out of energy-poor to energy-rich countries. This persuaded Rorento to put 24 per cent of its assets into sterling securities having previously held no sterling bonds at all. It sold its entire 10 per cent holding in yen bonds and reduced its German holding to 16 from 27 per cent, andi ts dollar holdings to 2 from 4 per cent.

Net assets of Rorento's stable companion, Robeco, fell in the first quarter of this year. Despite continued net purchases of its own shares, asset value per share fell slightly.

Total net assets fell 3.5 per cent to Fl 3.78bn during the quarter. Robeco bought in 750,000 shares reducing the number issued to 24m while value per share eased by Fl 1 to Fl 157.

New model leads Ford Australia upsurge

By James Forth in Sydney

FORD AUSTRALIA boosted profit sharply, from A$4m to A$16.2m (U.S.$17.7m) in the year to December, but the directors consider that the return on total assets was still far from satisfactory. The result was achieved on an 8 per cent sales gain from A$812m to a record A$951m (U.S.$1bn).

The introduction of a new model XD-Falcon was a major reason for the big jump in earnings. Ford is the last of the "big three" vehicle manufacturers to report a solid earnings recovery in the latest year. Chrysler Australia staged a turnround, from A$20.5m to a profit of A$12.3m, while General Motors-Holden's converted a deficit of A$18.4m to a A$4.6m profit.

A dividend of A$3.3m was paid to Ford's U.S. parent during the year, out of 1978 profits, but no dividend has been declared from the 1979 earnings. Ford's total unit sales rose from 123,544 vehicles to 133,527 despite a slight easing in Australian vehicles sales in 1979.

The company boosted export sales from A$19.9m to A$30.5m, which was the best export performance since 1973. Ford recently announced plans for an A$300m expansion programme, including a new plant to produce four cylinder engines.

APM plans further expansion

By Our Sydney Correspondent

AUSTRALIAN PAPER Manufacturers (APM) is studying the feasibility of a A$130m (U.S.$143m) expansion of its big pulp and paper mill at Maryvale in Victoria. The proposed expansion would be in addition to a new A$200m plant, consideration of which is already under way with the large base metals mining group, MIM (Holdings).

The Maryvale study continues APM's major expansion thrust of the past 12 months, which has included the acquisition of several companies. The proposed Maryvale expansion of the pulp million would lift annual production by 80,000 tonnes of softwood kraft pulp, to replace grades of pulp currently imported. The plant would also produce 60,000 tonnes a year of bleached eucalypt kraft pulp, a substantial proportion of which might be sold on the export market. The softwood would be drawn largely from APM's own plantations.

If it goes ahead the development would consolidate the Maryvale complex as one of the major decentralised industries in Victoria.

In another move in the timber industry, H. C. Sleigh has made a A$7.1m takeover bid for Tasmanian Board Mills (TBM).

Sleigh is offering A$1.60 a share in cash, which compares with the last sharemarket price of 73 cents. TBM directors have recommended the bid. Last August, Sleigh made a A$15m bid for Tasmanian Pulp and Forest Holdings (TPFH) but was topped by Associated Pulp and Paper Mills (APPM). After several bids, APPM won the day with an offer valuing TPFH at A$30.6m. Sleigh directors said that the activities of TBM complemented those of Northern Woodchips, a division of H. C. Sleigh Resources, and added that TBM would be co-ordinated with Northern Woodchips.

The additional facilities and resources would provide increased opportunities for a broad range of forest products.

TNT to raise A$11.26m by rights issue

By Our Sydney Correspondent

THOMAS NATIONWIDE Transport, the international transport group, plans to raise A$11.26m (US$12.3m) through a rights issue.

The new shares will be issued on a one-for-five basis to shareholders, optionholders and holders of 1985 convertible notes, and on a one-for-15 basis to holders of 1983 convertible notes. The issue price is only 50 cents a share, compared with the current sharemarket price in Sydney of A$2.40. On this basis the rights have a theoretical value of A$1.58.

TNT this week reported an 87 per cent jump in profit for the nine months to March of A$27.88m, well ahead of the A$23.25 earned for the full year to June, 1979.

TNT declared a quarterly dividend of 3 cents, and if this is maintained in the final quarter it will give an annual dividend payout of 12 cents, compared with 11 cents in 1978-79.

* * *

ESTIMATES OF the capital cost of the Alumax aluminium smelting project in the Hunter Valley, New South Wales, has been sharply revised to A$641m (U.S.$700m) from earlier estimates of A$535m, agencies report.

The venture will be 45 per cent owned by Alumax of Australia, 35 per cent by the BHP offshoot Dampier Mining Company and 20 per cent by the Mitsui-owned Alfarl.

JAPANESE SUPERMARKETS

Upward trend in earnings continues

BY YOKO SHIBATA IN TOKYO

JAPAN'S six major supermarket chain store operators continued their upward earnings trend in the fiscal year ended February, 1980.

Dai'ei achieved annual sales of Y1,000bn ($4bn) the first company to do so in Japan's retail industry. The strong sales performance was largely accounted for by an increase in floor space resulting from the opening of eight new sales outlets. Brisk sales of profitable products such as leisure related goods and household utensils also boosted turnover. Earnings improved by 29 per cent to Y9.17bn ($36.7m). This was due chiefly to a reduction of interest payments following the repayment of bank borrowing and the switching to low cost funds in the capital market.

Dai'ei plans to continue its policy of expanding sales outlets in the current fiscal year. Capital spending for the opening of 10 or 11 new sales outlets is planned at Y50bn, of which Y30bn is intended to be raised in the domestic capital market and in the overseas convertible issue market. The rest is to be financed partly from internal reserves.

The four increases in the official discount rate during 1979-80 are expected to take full effect in the current fiscal year, but by sales expansion and saving energy, Dai-ei is forecasting double figure growth in operating profits in the current fiscal year.

Ito-Yokado lifted turnover by 17 per cent to Y573.5bn ($2.33bn) helped by active sales of household utensils (up 22 per cent) and foods (up 33 per cent). The company opened eight new outlets during the year.

The company's 37 per cent advance in earnings to Y10.8bn ($43.2m) came with steps to streamline distribution. Ten new sales outlets are planned for the current fiscal year with capital spending of Y35bn. Ito Yokado's sales are forecast to reach Y680bn, up 20 per cent, and operating profits are expected to increase by 12 per cent in the current fiscal year.

	Sales		Operating profits		Net profits	
	Ybn	% change	Ybn	% change	Ybn	% change
Dai'ei	1,025.2	+ 9	18.12	+19	9.17	+29
Ito-Yokado	573.5	+17	20.6	+27	10.8	+37
JUSCO	502.4	+13	12.6	+17	7.4	+19
Nichii	396.9	+14	11.4	+12	6.3	+11
Uny	291.3	+12	9.9	+20	4.7	+26
Nagasakiya	237.5	+ 5	6.8	− 5	3.7	+12

Jusco's sluggish clothing sales were offset by increased turnover in food and household utensils. The company's interest burden was relieved by a reduction of Y5bn of borrowing in 1979-80, which largely accounted for the 17 per cent improvement in operating profits to Y12.6bn ($50.4m).

For the current fiscal year, interest payments are expected to increase by Y2bn and the company plans to compensate by stringent inventory control and by expanding sales of more profitable goods. With the help of 12 or 13 new outlets, sales for the current year are forecast to increase by 11 per cent, and operating profits by 15 per cent.

With active expansion of its sales floors, Nichii's turnover increased by 14 per cent to Y396.9bn ($1.59bn). However, a Y5bn increase in interest payments and the impact of the yen's deprecation on loans held back operating profits. Nichii plans an increase of 26 per cent in capital investment to Y40bn this year, funds for which it is intended to raise through public subscription. Interest payments are likely to increase by Y2.5bn however and utility price rises will also hurt profits.

By strengthening inventory controls and rationalisation, Nichii expects sales of Y46bn (up 24 per cent) and operating profits of Y13bn (up 14 per cent) for the current fiscal year.

Uny enjoyed overall sales improvements in food, household utensils, and clothing (up 10 per cent each). A reduction in interest payments, achieved by cutting dow nboth long-term and short-term borrowings by Y11.3bn, contributed to a 20 per cent improvement in operating profits to Y9.9bn ($39.6m). For the current fiscal year the company expects operating profits of Y10bn.

Nagasakiya alone suffered an earning setback, of 5 per cent to Y6.8bn ($27.2m), in 1979-80. Heavy interest payments resulted from high borrowings and because of the warm winter, the company's clothing sales, its main line, were sluggish. Nagasakiya plans to improve earnings by stressing sales of the more profitable goods, by holding down sales costs, and by renovating existing stores. Sales are expected to increase by 7 per cent and opjerating profits by 18 per cent in the current fiscal year.

Exchange rate lifts Tan Chong

BY WONG SULONG IN KUALA LUMPUR

TAN CHONG, the Malaysion and Singapore distributor of Datsun cars, has reported a near threefold increase in earnings for the year to December, to 65.5m ringgit (U.S.$28.8m) before tax. The half-year pre-tax profit was 26m ringgit.

Althogh the company maintained its position as the leading car distributor in Malaysia and Singapore, the profits resulted largely from foreign exchange gains, with the Malaysia ringgit rising by 24 per cent against the Japanese yen in 1979.

The group's turnover rose by 27 per cent to 430m ringgitt 27 per cent to 430m ringgit U.(S.$189m). Sales in Malaysia rose by 29 per cent to 310m ringgit, and in Singapore by 24 per cent to 120m ringgit.

Datsun sold more than 17,400 cars in Malaysia last year, capturing a quarter of the market.

Tan Chong is paying a 17.5 per cent final dividend, making 25 per cent for 1979 on the enlarged capital of 48m ringgit, compared with 20 per cent on the pervious capital of 36m ringgit.

Last week, the Malaysian Trade Ministry directed Tan Chong and other distributors of Japanese cars to reduce prices because of the strength of the ringgit. Datsun car prices are cut by some 8 per cent.

Group results at Canon

By Our Financial Staff

CANON, the Japanese manufacturer of cameras and business machines, raised its consolidated net income by 4 per cent in the year to December 31, to Y8.67bn ($34.7b), from Y8.34bn in the previous year.

Sales increased by 40.9 per cent to Y314.99bn ($1.3bn), from Y223.59bn. Earnings a share were Y40.03, against Y39.17.

COMPANY NOTICES

WAGONS-LITS

Messieurs les Actionnaires sont convoqués aux assemblées générales qui se tiendront à Bruxelles, à l'Hotel Astoria, 103 rue Royale, le Mardi 6 Mai 1980:

1.) à 14 heures 45: Assemblée Générale Extraordinaire qui devra se prononcer sur la proposition d'augmentation du capital de la société pour le porter de francs belges 779.240.000 à francs belges 1.038.986.500.

En représentation de cette augmentation de capital, il serait créé 519,493 actions ordinaires nouvelles d'une valeur nominale de francs belges 500 chacune, émises au prix de francs belges 750 par action, et offertes, à titre irréductible seulement, aux propriétaires d'action, anciennes, privilégiées ou ordinaires, à raison d'une action nouvelle pour trois actions anciennes; ces actions nouvelles porteraient jouissance à partir de la date de cloture de la souscription.

Il serait, en outre, procédé à la modification de l'article 5 des statuts.

2.) à 15 heures: Assemblée Générale Ordinaire pour approbation des comptes de l'exercice 1979 et nominations statutaires.

Les actions doivent être déposées cinq jours aù moins avant la date des assemblées:

à BRUXELLES: à la Société Générale de Banque, 3 Montagne du Parc, à la Banque Bruxelles-Lambert, 2 rue de la Régence — à la Société Générale Alsacienne de Banque, 72 rue Royale — à la Banque de Paris et des Pays-Bas, Belgique, World Trade Center, 162 boulevard Emile Jacqmain — à la Banque Jean Degroof & Co., 44 rue de l'Industrie.

à LONDRES: à la Midland Bank Limited, 30 St. Swithins Lane.

E.N.E.L.

7¼ per cent 1971/1986 Loan of ECU 60,000,000

Notice is hereby given to bondholders of the above loan that the Deutsche Mark (1 ECU = DM 3.66) has been selected as payment currency for drawn debentures and Coupon No. 9. The drawn debentures and Coupon No. 9 will be payable on or after May 1, 1980 by the paying agents mentioned on the debentures.

Fiscal Agent
KREDIETBANK
S.A. Luxembourgeoise

GENERAL MINING AND FINANCE CORPORATION LIMITED
(Incorporated in the Republic of South Africa)

DIVIDEND NO. 108— COUPON NO. 110

Holders of share warrants to bearer will receive payment on or after the 2nd May, 1980 at the rate of 41.78273p the amount declared per share less 6.26741p being South African Non-Resident Shareholders' Tax of 15% against surrender of Coupon No. 110.

Coupons must be deposited for THREE CLEAR DAYS for inspection before payment will be made:

In London, at National Westminster Bank Limited, Stock Office Services, 5th Floor, Drapers Gardens, 12 Throgmorton Avenue, London EC2.
In Paris, at Credit du Nord, 6 & 8 Boulevard Haussmann.
In Basle, at Swiss Bank Corporation.
In Zurich, at Credit Suisse.

Coupons belonging to holders resident in Great Britain and Northern Ireland will be paid as follows:

	p
Amount of Dividend after deduction of South African Non-Resident Shareholders' Tax of 15%	35.51532
Less: United Kingdom Income Tax of 15% on the gross amount of the Dividend of 41.78273p	6.26741
	29.24791

Listing forms can be obtained on application to the National Westminster Bank Limited, at the address shown above.

By Order,
GENERAL MINING AND FINANCE CORPORATION LIMITED
L. J. BAINES
London Secretary

London Office:
Princes House,
95 Gresham Street,
LONDON EC2V 7EN.
23rd April, 1980

NOTE:
Under the double tax agreement between the United Kingdom and the Republic of South Africa, the South African Non-Resident Shareholders' tax applicable to the dividend is allowable as a credit against the United Kingdom tax payable in respect of the dividend. The deduction of tax at the reduced rate of 15 per cent instead of at the basic rate of 30 per cent represents an allowance of credit at the rate of 15 per cent.

The gross amount of the dividend received to be entered by the individual shareholder on any return for income tax purposes is 41.78273p multiplied by the number of shares held.

W. F. JOHNSTONE & COMPANY LIMITED
(Incorporated in the Republic of South Africa)

Interim Ordinary Division of twenty four per cent equivalent to twelve cents per share (1979 fourteen per cent seven cents per share) was declared on 14th April, 1980 payable to Ordinary Shareholders registered in the books of the Company at close of business on 16th May, 1980. Dividend declared in currency of Republic of South Africa and warrants in payment will be posted to shareholders on or about 6th June, 1980. In terms of Income Tax Act non-resident shareholders' tax of fifteen per cent will be deducted from dividends due to shareholders whose addresses in share register are outside Republic. Transfer books and Register of Members will be closed from 17th May, 1980 to 6th June, 1980, both days inclusive.

By Order of the Board.
A. D. BRUNT, A.C.I.S.,
Secretary.

Registered Office:
10 Quality Street,
Mobeni, Natal,
South Africa.
London Transfer Secretaries:
Hill Samuel Registrars Limited,
6 Greencoat Place,
London SW1P 1PL.
21st April, 1980.

UNILEVER N.V.
Certificates for Ordinary Sub-Shares of Fl 12 issued by
N.V. Nederlandsch Administratie En Trustkantoor

NOTICE IS HEREBY GIVEN that EXCHANGES of Sub-Share Certificates in the name of Midland Bank Executor and Trustee Company Limited, now MIDLAND BANK TRUST COMPANY LIMITED, for Bearer Certificates and Unilever N.V. New York Shares and vice versa will be SUSPENDED from 9th May, 1980, to 22nd May, 1980.

Certificates will only be acceptable for exchange after 22nd May, 1980, provided that all dividends declared prior to that date have been claimed.

N.V. NEDERLANDSCH ADMINISTRATIE- EN TRUSTKANTOOR.

London Transfer Office:
Unilever House,
Blackfriars,
London EC4P 4BQ.
21st April, 1980.

ROYAL BANK OF CANADA

DIVIDEND NO. 371

NOTICE IS HEREBY GIVEN that a Dividend of 60 cents per share upon the paid up capital of this bank has been declared for the current quarter and will be payable at the Bank and its branches on or after May 23rd, 1980 to shareholders of record at the close of business on April 24th, 1980.

By Order of the Board.
R. A. UTTING,
Executive Vice-President & Chief General Manager.

UNILEVER N.V.
ROTTERDAM
THE NETHERLANDS

ANNUAL GENERAL MEETING OF SHAREHOLDERS

On Wednesday, May 14, 1980 at 10.30 a.m. in the "Kleine Zaal" of the "Concert- en Congresgebouw de Doelen", entrance Kruisplein 30, Rotterdam.

AGENDA
1. Annual Report for 1979.
2. Approval and adoption of the Balance Sheet and the Profit and Loss Account for 1979 and adoption of the proposed Profit Appropriation for 1979.
3. Appointment of the Board of Directors.
4. Appointment of Auditors.
5. Questions.

This agenda, the Annual Report for 1979 including the Balance Sheet, the Profit and Loss Account, the proposed Profit Appropriation and the nominations relating to Items 3 and 4 of the agenda are available for inspection by shareholders and holders of certificates issued by N.V. Nederlandsch Administratie- en Trustkantoor at the Company's office, Burg. s-Jacobplein, Roterdam, and at the offices of the Banks mentioned below, where copies may be obtained free of charge.

(A) Holders of bearer shares or sub-shares wishing to attend the meeting either in person or by proxy appointed in writing must deposit their share certificates and sub-share certificates by Wednesday, May 7, 1980, at the Company's office or at the offices of the Amsterdam-Rotterdam Bank N.V. in Amsterdam, Rotterdam or The Hague; of the Kredietbank in Antwerp, the Generale Bankmaatschappij or Bank Brussel Lambert in Brussels; of Midland Bank Limited in London, or any of its branches; of Banque Rothschild in Paris, or the Dresdner Bank A.G., or the Deutsche Bank A.G. in Hamburg, Düsseldorf, Frankfurt-am-Main or Munich, or the Bank für Handel und Industrie A.G. or the Berliner Disconto Bank in Berlin; of the Creditanstalt-Bankverein, the Oesterreichische Länderbank A.G. or Schoeller & Co. in Vienna or any of their branches, of the Schweizerischer Bankverein (Swiss Bank Corporation), the Schweizerische Kreditanstalt (Swiss Credit Bank) in Zurich, Geneva, Basle or Lausanne or of Morgan Guaranty Trust Company of New York in New York City. Upon production of the receipt then issued to them such holders will be admitted to the meeting.

(B) Holders of registered shares, certificates for which are countersigned by Morgan Guaranty Trust Company of New York ("New York Shares"), wishing to attend the meeting either in person or by proxy appointed in writing must notify the Company of their intention on the form provided by the Company (or by letter, stating the numbers of their share certificates), which must reach Morgan Guaranty Trust Company of New York, 30 West Broadway, New York, N.Y. 10015, by Wednesday, May 7, 1980.

(C) Holders of registered shares for which certificates have been issued in another form and holders of booked shares wishing to attend the meeting either in person or by proxy appointed in writing must notify the Company of their intention by letter, stating the numbers of the share certificates or of the bookings for the shares, which must reach Unilever N.V., Afdeling Effecten en Coupons, Rotterdam, by Wednesday, May 7, 1980.

(D) Holders of certificates for shares in Unilever N.V. issued by N.V. Nederlandsch Administratie- en Trustkantoor of Amsterdam ("Nedamtrust certificates") wishing to attend the meeting without taking part in the voting must deposit such certificates by Wednesday, May 7, 1980 at any of the offices mentioned in (A) above. Upon production of the receipt then issued to them, such certificate holders will be admitted to the meeting.

(E) Holders of certificates for shares in Unilever N.V. issued by N.V. Nederlandsch Administratie- en Trustkantoor in the name of Midland Bank Trust Company Limited (or in its former name Midland Bank Executor and Trustee Company Limited), "sub-share certificates", wishing to attend the Meeting without taking part in the voting must deposit such sub-share certificates with Midland Bank Limited, Mariner House, Pepys Street, London, EC3N 4DA or any of its branches by Wednesday, May 7, 1980. Upon production of the receipt then issued to them such sub-share certificate holders will be admitted to the Meeting.

(F) If holders of the certificates mentioned in (D) and (E) above wish to exercise voting rights at the meeting either in person or by proxy appointed in writing, N.V. Nederlandsch Administratie- en Trustkantoor will exchange such certificates free of charge for original shares, which it will hold in the names of such holders at its own office (such office being the designated place of deposit in the event) and exchange the same again after the meeting free of charge for Nedamtrust certificates to be issued to such holders in accordance with the conditions of administration of these certificates. For such purpose holders must by Tuesday, May 6, 1980:

surrender their certificates for Fl. 20 or a multiple thereof (but, in the case of certificates for 7% cumulative preference shares, representing a total nominal amount of Fl. 1,000 or a multiple thereof) to N.V. Nederlandsch Administratie- en Trustkantoor, Keizersgracht 553, Amsterdam, and/or

surrender their sub-share certificates for Fl. 12 nominal amount or multiples thereof, representing a total nominal amount of at least Fl. 60 per class (but, in the case of sub-share certificates for 7% cumulative preference shares, representing a total nominal amount of Fl. 1,000 or a multiple thereof) to Midland Bank Limited, Mariner House, Pepys Sleet, London EC3N 4DA or any of its branches.

The certificates so surrendered must be accompanied by a request in writing as described in the conditions of administration, forms for the purpose being obtainable free of charge from N.V. Nederlandsch Administratie- en Trustkantoor, Amsterdam, and Midland Bank Limited, London. Upon production of the receipts then issued by N.V. Nederlandsch Administratie-en Trustkantoor and Midland Bank Limited respectively the holders will be admitted to the meeting.

The receipt issued by Midland Bank Limited for sub-share certificates so surrendered incorporates a two-way proxy form.

THE BOARD OF DIRECTORS
April 23, 1980.
Rotterdam.

RESIDENTIAL PROPERTY

PUBLIC NOTICES

CANNOCK CHASE D.C.
£235,000 Bills issued today due 23.7.80 at 16⅛%. Total apps. £1.88m. Total o/s £235,000.

TRAVEL

LEGAL NOTICES

IN THE MATTER OF
GRASS FASHIONS LIMITED
AND IN THE MATTER OF
THE COMPANIES ACT 1948

NOTICE IS HEREBY GIVEN that the creditors of the above-named Company, which is being voluntarily wound up, are required, on or before the 29th day of May, 1980, to send in their full Christian and surnames, their addresses and descriptions, full particulars of their debts or claims, and the names and addresses of their Solicitors (if any), to the undersigned Keith David Goodman, FCA, of Messrs Leonard Curtis & Co., 3/4 Bentinck Street, London W1A 3BA, the Liquidator of the said Company, and, if so required by notice in writing from the said Liquidator, are, personally or by their Solicitors, to come and prove their debts or claims at such time and place as shall be specified in such notice, or in default thereof they will be excluded from the benefit of any distribution made before such debts are proved.

Dated this 17th day of April, 1980.
K. D. GOODMAN, Liquidator.

SALES BY AUCTION

Companies and Markets

CURRENCIES, MONEY and GOLD

$ & £ firm

THE DOLLAR and sterling were generally firm in subdued foreign exchange trading yesterday. Both currencies were helped by expectations that the U.S. and Britain are likely to be less severely hit by a cut-off of Iranian oil supplies than Japan and the rest of Europe.

The U.S. currency rose to DM 1.8610 from DM 1.8510 against the D-mark, and to SwFr 1.7385 from SwFr 1.7250 in terms of the Swiss franc. The Japanese yen remained weak around Y250, and all major currencies continued to decline against the dollar in New York shortly after the London close. On Bank of England figures, the dollar's trade-weighted index rose to 88.9 from 88.7.

Sterling's index, as calculated by the Bank of England, rose to 73.5 from 73.2, after standing at 73.6 at noon and 73.7 in the morning.

The pound opened at $2.2460-2.2470, and touched a peak of $2.2490-2.2500 in the morning, before declining to $2.2435 at noon. In the afternoon sterling touched $2.2325, but improved to $2.2400, before closing at $2.2370-2.2380, a rise of 45 points on the day. Sterling rose to DM 4.1650 from DM 4.1350 against the D-mark, to FFr 9.68 from FFr 9.6125 against the French franc, and to SwFr 3.89 from SwFr 3.8550 against the Swiss franc.

D-MARK — Slightly improved within the European Monetary System, showing a stronger trend against dollar, after a weakness caused by expectations of a continuing balance of payments deficit in Germany and effects of anti-inflation measures and higher interest rates in the U.S. —The D-mark showed mixed changes against its EMS partners at the Frankfurt fixing, while losing ground to most major currencies outside ethsystem. The French franc, strongest member of the EMS, fell to DM 42.97 per 100 francs from DM 43.03, but the Italian lira, the weakest EMS currency, rose to DM 2.135 per 1,000 lira from DM 2.132. The dollar was fixed at DM 1.8565, compared with DM 1.8512, without any intervention by the Bundesbank. Sterling rose to DM 4.1640 from DM 4.1260, and the Swiss franc to DM 1.0719 from DM 1.0700.

ITALIAN LIRA—Rather erratic within EMS; and falling to bottom of the system in recent weeks, after rising to the top during February—The lira gained ground against most members of the EMS at the Milan fixing, but declined against the dollar and sterling. The D-mark fell to L468.75 from L469.48, and the French franc to L201.54 from L201.92. Outside the EMS the dollar rose to L870.80 from L868.55, and sterling to L1,948.60 from L1,941.25, while the Swiss franc fell to L501.65 from L503.80.

FRENCH FRANC — Strongest member of the EMS, supported by firm interest rates—The franc eased against most major currencies at the Paris fixing, declining against the dollar, and sterling, but improving slightly against the Swiss franc. Within the EMS the D-mark, Italian lira, Belgian franc, Dutch guilder and Irish punt gained ground against the franc, but the Danish krone eased.

DANISH KRONE—Remaining weak within the EMS and suffering two devaluations during the last year—The krone weakened against its EMS partners and other major currencies at the Copenhagen fixing. The dollar improved to DKr 5.8010 from DKr 5.7805 and sterling to DKr 13.0170 from DKr 12.8705.

JAPANESE YEN—Energy and balance of payments problems reflected in sharp decline last year, which after a slight pause has been renewed, although heavy central bank intervention has abated—The Tokyo market reacted calmly to the suspension of Iranian oil shipments to Japan, with the yen fluctuating narrowly in light trading. The dollar rose to Y250.10 from Y249.85, after opening at Y250.20, and touching a low point of Y249.85.

THE DOLLAR SPOT AND FORWARD

April 22	Day's Spread	Close	One month	% p.a.	Three months	% p.a.
UK†	2.2325-2.2500	2.2370-2.2380	0.08c pm-0.02 dis	0.16	0.15-0.05 pm	0.18
Ireland†	2.0100-2.0145	2.0100-2.0110	0.22-0.12c pm	1.01	1.00-0.85 pm	1.84
Canada	1.1836-1.1880	1.1852-1.1856	0.30-0.26c pm	2.83	0.32-0.28 pm	1.01
Nethlnd.	2.0008-2.0415	2.0400-2.0415	1.41-1.34c pm	8.08	3.44-3.37 pm	6.67
Belgium	29.78½-29.84	29.79-29.81	1c pm-1 dis	—	2 pm-1 dis	0.07
Denmark	5.7885-5.8025	5.7975-5.7990	0.75-1.25ore dis	-2.07	3.00-3.50dis	-2.24
W. Ger.	1.8510-1.8635	1.8605-1.8615	1.43-1.33pf pm	8.90	3.65-3.55 pm	7.74
Portugal	50.00-50.15	50.00-50.15	par-15c dis	-1.80	10-55 dis	-1.80
Spain	71.51-71.64	71.54-71.64	10-25c dis	-2.93	45-65 dis	-3.08
Italy	870.00-871.25	870.75-871.25	1-2lire pm	1.03	par-1½ dis	-0.34
Norway	5.0310-5.0460	5.0330-5.0350	1.90-1.40ore pm	3.93	4.30-3.80 pm	3.22
France	4.3100-4.3280	4.3245-4.3265	1.85-1.75c pm	4.99	4.35-4.15 pm	3.93
Sweden	4.3410-4.3610	4.3490-4.3500	1.45-1.25ore pm	3.72	3.50-3.30 pm	3.13
Japan	249.50-250.30	249.95-250.05	1.15-1.00y pm	5.16	2.60-2.45 pm	4.04
Austria	13.27½-13.28	13.25-13.26	9.20-8.40gro pm	7.97	23.75-21.25pm	6.79
Switz.	1.7240-1.7430	1.7380-1.7390	1.79-1.69c pm	12.01	4.31-4.21 pm	9.80

† UK and Ireland are quoted in U.S. currency. Forward premiums and discounts apply to the U.S. dollar and not to the individual currency.

THE POUND SPOT AND FORWARD

April 22	Day's Spread	Close	One month	% p.a.	Three months	% p.a.
U.S.	2.2325-2.2500	2.2370-2.2380	0.08c pm-0.02 dis	0.16	0.15-0.05 pm	0.18
Canada	2.6460-2.6595	2.6485-2.6495	0.70-0.60c pm	2.94	0.95-0.85 pm	1.36
Nethlnd.	4.55½-4.58½	4.56½-4.57½	3⅛-2⅝c pm	7.22	7⅝-6⅞ pm	6.34
Belgium	66.60-67.10	66.65-66.75	5c pm-5 dis	—	10 pm-par	0.30
Denmark	12.95-13.01	12.97½-12.98½	1-2¼ore dis	-1.44	6½-7½ dis	-2.14
Ireland	1.1110-1.1170	1.1115-1.1125	0.08-0.03p pm	0.59	0.31-0.26 pm	1.02
W. Ger.	4.14½-4.18	4.16-4.17	3⅛-2⅝pf pm	9.08	8¼-7⅛ pm	7.92
Portugal	111.90-112.70	111.95-112.15	12c pm-22 dis	-0.53	18-128 dis	-2.60
Spain	159.80-160.75	159.85-159.95	10-45c dis	-2.06	95-145 dis	-3.00
Italy	1,947-1,957	1,948-1,949	1½lire pm-½ dis	0.31	1 pm-1 dis	—
Norway	11.26-11.31	11.27½-11.28½	4¾-3¼ore pm	3.99	9⅛-8⅛ pm	3.17
France	9.65½-9.72½	9.67½-9.68½	4¼-3⅜c pm	4.85	11-10 pm	4.34
Sweden	9.72-9.76	9.73½-9.74½	3½-2¼ore pm	3.85	8½-7½ pm	3.34
Japan	557-565	559-560	2.65-2.20y pm	5.20	5.80-5.15 pm	3.94
Austria	29.60-29.75	29.65-29.70	24-18gro pm	8.49	55-45 pm	6.74
Switz.	3.86½-3.90½	3.88½-3.89½	4-3c pm	10.80	9¼-8¼ pm	9.51

Belgian rate is for convertible francs. Financial franc 68.45-68.55. Six-month forward dollar 0.15-0.05c pm. 12-month 1.10-0.95c pm.

CURRENCY RATES

April 21	Bank rate %	Special Drawing Rights	European Currency Unit
Sterling	17	0.572410	0.608286
U.S. $	13	1.27533	1.36043
Canadian $	15.96	1.50757	1.60830
Austria Sch.	6¾	16.8407	17.9305
Belgian F.	14	Unavail.	40.4886
Danish K	13	7.36758	7.84629
D'Mark	7	2.36089	2.51476
Guilder	9½	2.59338	2.76508
French Fr.	9½	5.48774	5.84985
Lira	15	1107.62	1180.85
Yen	9	319.725	339.904
Norwgn. Kr.	9	6.42129	6.83753
Spanish Pts.	8	91.1223	97.2028
Swedish Kr.	10	5.53646	5.89774
Swiss Fr.	3	Unavail.	2.34724

CURRENCY MOVEMENTS

April 22	Bank of England Index	Morgan Guaranty Changes %
Sterling	73.5	-32.2
U.S. dollar	88.9	-4.7
Canadian dollar	80.7	-17.7
Austrian schilling	154.6	+24.0
Belgian franc	115.1	+13.7
Danish kroner	105.9	-5.0
Deutsche mark	153.5	+43.8
Swiss franc	194.0	+76.5
Guilder	124.8	+19.3
French franc	100.4	-6.3
Lira	53.3	-50.7
Yen	115.4	+14.3

Based on trade weighted changes from Washington agreement December, 1971 (Bank of England Index=100).

OTHER CURRENCIES

April 22	£	$		£ Note Rates
Argentina Peso	3952-3972	1768-1775	Austria	29.55-29.80
Australia Dollar	2.0375-2.0415	0.9115-0.9120	Belgium	68.20-68.80
Brazil Cruzeiro	107.43-108.48	48.14-48.34	Denmark	12.92-12.99
Finland Markka	8.48-8.51	3.8000-3.8020	France	9.61-9.67
Greek Drachma	93.424-95.616	41.90-42.20	Germany	4.14-4.17
Hong Kong Dollar	11.12¼-11.14¼	4.9700-4.9730	Italy	1920-1985
Iran Rial	n/a	n/a	Japan	559-564
Kuwait Dinar(KD)	0.612-0.622	0.2749-0.2750	Netherlands	4.55-4.58
Luxembourg Frc.	65.65-66.75	29.79-29.81	Norway	11.24-11.31
Malaysia Dollar	5.1125-5.1225	2.2840-2.2860	Portugal	107-111½
New Zealand Dlr.	2.3465-2.3515	1.0495-1.0505	Spain	155½-163½
Saudi Arab. Riyal	7.42-7.52	3.3290-3.3320	Sweden	9.70-9.75
Singapore Dollar	4.9600-4.9700	2.2155-2.2175	Switzerland	3.87-3.90
Sth. African Rand	1.8035-1.8045	0.8060-0.8065	United States	2.2325-2.2415
U A.E. Dirham	8.30-8.40	3.7210-3.7240	Yugoslavia	48½-51¾

Rate given for Argentina is free rate.

EMS EUROPEAN CURRENCY UNIT RATES

	ECU central rates	Currency amounts against ECU April 22	% change from central rate	% change adjusted for divergence	Divergence limit %
Belgian Franc	39.7897	40.3809	+1.49	+0.56	±1.53
Danish Krone	7.72336	7.86241	+1.80	+0.87	±1.64
German D-Mark	2.48208	2.51925	+1.50	+0.57	±1.125
French Franc	5.84700	5.85287	+0.10	-0.83	±1.3557
Dutch Guilder	2.74362	2.76615	+0.82	-0.11	±1.512
Irish Punt	0.668201	0.673758	+0.83	-0.10	±1.668
Italian Lira	1157.79	1180.41	+1.95	+1.53	±4.08

Changes are for ECU, therefore positive change denotes a weak currency. Adjustment calculated by Financial Times.

EXCHANGE CROSS RATES

April 22	Pound Sterling	U.S. Dollar	Deutschem'k	Japan'se Yen	French Franc	Swiss Franc	Dutch Guild'	Italian Lira	Canada Dollar	Belgian Franc
Pound Sterling	1.	2.238	4.165	559.5	9.680	3.890	4.575	1949.	2.649	66.70
U.S. Dollar	0.447	1.	1.861	250.1	4.326	1.739	2.044	870.0	1.184	29.81
Deutschemark	0.240	0.537	1.	134.3	2.324	0.934	1.098	467.8	0.636	16.01
Japanese Yen 1,000	1.787	3.999	7.444	1000.	17.30	6.953	8.172	3483.	4.735	119.2
French Franc 10	1.033	2.311	4.303	578.0	10.	4.019	4.724	2013.	2.737	68.90
Swiss Franc	0.257	0.575	1.071	143.8	2.488	1.	1.175	500.9	0.681	17.15
Dutch Guilder	0.219	0.489	0.911	122.4	2.117	0.851	1.	426.1	0.579	14.59
Italian Lira, 1,000	0.513	1.148	2.138	287.1	4.968	1.996	2.347	1000.	1.360	34.23
Canadian Dollar	0.378	0.845	1.572	211.2	3.654	1.468	1.726	735.6	1.	25.18
Belgian Franc 100	1.499	3.355	6.244	838.8	14.51	5.832	6.855	2921.	3.972	100.

EURO-CURRENCY INTEREST RATES

The following nominal rates were quoted for London dollar certificates of deposit: one-month 17.00-17.10 per cent; three-months 16.60-16.70 per cent; six months 15.30-15.40 per cent; one year 14.10-14.20 per cent.

April 22	Sterling	U.S. Dollar	Canadian Dollar	Dutch Guilder	Swiss Franc	West German Mark	French Franc	Italian Lira	Asian $	Japanese Yen
†Short term	17⅛-17⅜	17-17¼	13-15	10¼-10½	3⅛-4⅛	8⅞-8⅞	12¼-12½	11-13	17⅝-17¾	10¾-11¼
7 days' notice	17¼-17⅜	17⅛-17⅜	13-15	10¼-10½	7-8	8⅞-8⅞	12¼-12½	11-13¼	17⅝-17¾	11-11½
Month	17¼-17⅜	17⅛-17⅜	14⅞-15½	10¼-10½	6⅛-6⅛	8⅞-9⅛	12⅛-12⅜	17-18	17⅛-17¼	12⅛-12½
Three months	17⅛-17⅜	17-17¼	15⅝-16	10½-10¾	7-7⅛	9⅛-9⅛	12⅝-12⅞	17-18	16⅞-17⅛	13-13¼
Six months	16⅛-16⅜	16-16¼	15¼-15⅝	10½-10¾	7-7⅛	8⅞-9⅛	13-13¼	16½-17¼	16⅛-16⅜	12⅝-12½
One year	15⅝-15¾	14⅞-15⅛	14¼-14⅝	10½-10¾	6⅛-6⅝	8⅞-9	13⅛-13⅜	16½-17½	14⅞-15	11⅛-11¼

Long-term Eurodollar two years 13⅞-13¹³⁄₁₆ per cent; three years 13-13½ per cent; four years 13-13¾ per cent; five years 12¾-13 per cent; nominal closing rates. Short-term rates are call for sterling, U.S. dollars, Canadian dollars and Japanese yen; others two days' notice. Asian rates are closing rates in Singapore.

INTERNATIONAL MONEY MARKET

French rates firm

Interest rates in Paris continued to rise yesterday, with call money reaching its highest level this month at 12⅞ per cent, up from Monday's figure of 12⅝ per cent. Period rates were also higher where changed, with three-month money 12¹³⁄₁₆ per cent, against 12¾ per cent. Within the European Monetary System, the French franc remained the most improved currency, reflecting the authorities firm intention to maintain a strong currency.

In Frankfurt call money was unchanged at 8.95 per cent, while longer term rates showed an easier tendency. Three-month money fell to 10 per cent from 10.1 per cent and six-month money was lower at 10 per cent against 10.25 per cent previously. The easing of longer term rates was mainly technical according to market sources, reflecting the improved liquidity situation now that tax payments have largely been paid. But although market conditions are generally stable at the moment, there is a good deal of nervousness in the market following two Bundesbank meetings in the past two weeks coupled with official policy of maintaining a tight monetary policy.

A revised market liquidity level of SwFr6bn will not indicate any tightening of monetary policy, according to the Swiss National Bank in Zurich yesterday. A previous estimate published last December put the level of liquidity at SwFr 7bn but recent statistics put the present level of liquidity more at SwFr 6bn. However, the National Bank is to provide additional funds towards the end of this month which should increase liquidity levels to about SwFr 8bn.

MONEY RATES

NEW YORK	
Prime Rate	19½-19¾
Fed Funds	16⅞-17
Treasury Bills (13-week)	12.65
Treasury Bills (26-week)	11.85
GERMANY	
Discount Rate	7
Overnight Rate	8.95
One month	9.22½
Three months	10
Six months	10
FRANCE	
Discount Rate	9.5
Overnight Rate	12.875
One month	12.6875
Three months	12.8125
Six months	12.8125
JAPAN	
Discount Rate	9
Call (Unconditional)	12.25
Bills Discount (three-month)	13.3062

UK MONEY MARKET

Small help

Bank of England Minimum Lending Rate 17 per cent (since November 15, 1979)

Day to day credit continued to be in short supply in the London money market yesterday, and the authorities gave assistance on a small scale, the lowest level of help for over a month. They bought a small amount of Treasury bills, all direct from discount buoses, and a small number of local authority bills both from discount houses and banks. The market was faced with a small net take up of Treasury bills to finance and the repayment of Monday's moderate advances. On the other hand banks brought forward balances a moderate way above target, and there was a moderate excess of Government disbursements over revenue transfers to the Exchequer.

Discount houses were paying up to 17 per cent for secured call loans at the start, but later balances were taken as low as 16 per cent. In the interbank market overnight loans opened at 17-17½ per cent and rose on the early forecast to 17½-17¾ per cent before coming back to 16¾-17 per cent by noon. During the afternoon rates fell away to 15 per cent, but late demand pushed up the cost of overnight money to 17-17½ er cent.

Rates in the table below are nominal in some cases.

LONDON MONEY RATES

April 22 1980	Sterling Certificate of deposit	Interbank	Local Authority deposits	Local Auth. negotiable bonds	Finance House Deposits	Company Deposits	Discount market deposits	Treasury Bills ♦	Eligible Bank Bills ♦	Fine Trade Bills ♦
Over night	—	15-17½	—	—	—	17-17½	16-17	—	—	—
2 days notice	—	—	17⅛-17¾	—	—	—	—	—	—	—
7 days or	—	—	—	—	—	—	—	—	—	—
7 days notice	—	17¼-17⅜	17⅝-17¾	—	—	—	—	—	—	—
One month	17⅛-17⅜	17⅛-17⅜	17⅝	18¾-18½	17¾	17⅛-17⅜	16⅞-17	—	—	—
Two months	17⅛-17⅜	17⅛-17⅜	—	18¾-18⅛	17⅞	17¾-18⅛	16¾	15⅞-15⅜	17⅛	17¾
Three months	17⅛-17¼	17⅛-17⅛	17⅛-17⅜	17⅞-17⅜	17⅞	—	16⅝-16¾	16⅛	17⅛	17⅝
Six months	16⅛-16⅞	16⅛-16⅝	16⅝	16⅝-16⅛	17⅛	17⅛	16⅝	16⅛	16⅞	17⅛
Nine months	16-15⅞	16-16⅛	—	16⅛-16⅛	16⅜	17⅛	—	—	15⅞-15⅝	16
One Year	15¾-15⅝	15¾-15⅞	16-16⅛	15⅛-15⅞	16⅝	—	—	—	—	—
Two years	—	—	15¾-16	—	16⅛	16¾	—	—	—	—

Local authorities and finance houses seven days' notice, others seven days' fixed. *Long-term local authority mortgage rates nominally three years 15¾-15⅞ per cent; four years 14¾-15⅛ per cent; five years 14⅞-15⅛ per cent. ♦Bank bill rates in table are buying rates for prime paper. Buying rates for four-month bank bills 16⅝-16⅞ per cent; four-month trade bills 17 per cent.

Approximate selling rates for one-month Treasury bills 15²¹⁄₃₂-15²⁷⁄₃₂ per cent; two-months 15²⁵⁄₃₂ per cent; three-months 16⁷⁄₃₂ per cent. Approximate selling rates for one-month bank bills 17⅛ per cent; two-months 17 per cent; three-months 16⅝-16²³⁄₃₂ per cent; one-month trade bills 17⅞ per cent; two-months 17⅞ per cent and three-months 16⅞ per cent.

Finance Houses Base Rates (published by the Finance Houses Association) 18 per cent from April 1, 1980. Clearing Bank Deposit Rates for sums at seven days' notice 15 per cent. Clearing Bank Rates for lending 17 per cent. Treasury Bills: Average tender rates of discount 16.1176 per cent.

GOLD

Firmer tone

Gold rose $8 to close at $503-508 in very quiet trading in the London bullion market. The metal opened at $490-495 and was fixed at $494.50 in the morning, and $502.40 in the morning, and finished at the highest level of the day.

In Paris the 12½ kilo gold bar was fixed at FFr 71,000 per kilo ($511.12 per ounce) in the afternoon, compared with FFr 70,550 ($507.65) in the morning, and FFr 72,500 ($524.04) Monday afternoon.

In Frankfurt the 12½ kilo bar was fixed at DM 29,640 per kilo ($497.00 per ounce), compared with DM 30,320 ($509.03) previously and closed at $500-$505, compared with $502-507 previously.

In Zurich gold closed at $499-503, unchanged from Monday.

	April 22		April 21	
Gold Bullion (fine ounce)				
Close	$503-508	(£224.8-227)	$498-500	(£221.6-223.8)
Opening	$490-495	(£218.1-220.3)	$510-515	(£229¼-231¼)
Morning fixing	$494.50	(£220.336)	$506.50	(£227.181)
Afternoon fixing	$502.40	(£224.186)	$505	(£226.682)
Gold Coins				
Krugerrand	$515-520	(£229-232)	$507-511	(£227-230)
Mapleleaf	$505-515	(£225-230)	$523-533	(£234-239)
New Sovereigns	$127-130	(£56½-58½)	$132-137	(£59-61)
King Sovs	$157-160	(£70-71½)	$158-163	(£71-73)
Victoria Sovs	$157-160	(£70-71½)	$158-163	(£71-73)
French 20s	$131-134		$136-141	
50 pesos Mexico	$629-635		$635-640	
100 Cor. Austria	$497-504		$485-495	
$20 Eagles	$632¼-537½		$636-646	
$10 Eagles	—		—	
$5 Eagles	—		—	

هكذا من الأصل

APPOINTMENTS

Sir Monty Finniston joins Bodycote

Sir Monty Finniston has been appointed a non-executive director of BODYCOTE INTERNATIONAL and has also joined the Board of its engineering subsidiary, Blandburgh.

★

Mr. Edward Rose, chairman of BANRO CONSOLIDATED INDUSTRIES, has been appointed to the additional post of chief executive. Mr. John Hooper, finance director of Banro, has become chairman of EDWARD ROSE (FRANCE), a company formed to control the group's acquisition of a majority shareholding in Farnier and Penin of France. Other members of the Board of the new concern are Mr. Edward Rose, Mr. A. V. Pitcher, Mr. R. N. Pilgrim, Mr. Pierre Balloffet and Mr. J. C. Hilaire. Mr. Balloffet is president, directeur general of Farnier and Penin SA.

★

Mr. R. Whitelaw has been appointed company secretary of LITHGOWS (HOLDINGS) in succession to Mr. Werner Weis, who becomes full-time executive director in charge of group expansion.

★

Mr. Gordon A. Cumming has joined GRINDLAY BRANDTS INSURANCE BROKERS as a director and has become deputy chairman of its subsidiary Grindlay Brandts Life and Pensions.

★

Mr. Peter Strutt is to relinquish the managing directorship of TOLLEMACHE AND COBBOLD BREWERIES from January 1, 1981, but will remain chairman of that concern and a director of Ellerman Lines. Mr. Graeme Falconer, at present production and distribution director at Tolly Cobbold, will be managing director of that company. Mr. Maurice Lloyd, the head brewer, is to succeed Mr. Falconer as production and distribution director and will join the Board of Tolly Cobbold.

★

Mrs. Janet P. Chamberlain has been appointed a director of CHARTERHOUSE JAPHET EXPORT FINANCE and CHARTERHOUSE JAPHET DISTRIBUTOR FINANCE. Mrs. Chamberlain joined Charterhouse Japhet Export Finance in 1976 as assistant manager.

Mrs. Janet Chamberlain

★

Mr. Peter Goode has been made marketing director-Europe, responsible for HOOVER sales in the UK, Continental Europe and Scandinavia. Mr. Richard Tatschner has been appointed director of operations. He is also responsible for the operations in Australia and South Africa.

★

Mr. R. Ross, previously marketing director of Brush Power Equipment, has been appointed managing director of Hawker Siddeley Electric Zambia and director, administration, on the Board of South Wales Electric Zambia. Mr. Ross *succeeds Mr. J. Simnett.* The responsibility for the supervision of Hawker Siddeley Electric Zambia has been transferred from Hawker Siddeley International to Brook Crompton Parkinson Motors, at Huddersfield, and the Board of Hawker Siddeley Electric Zambia has been reconstituted as follows: Mr. J. C. Mansfield, chairman; Mr. R. Ross, managing director; Mr. A. M. McGhie; Mr. W. L. Denness and Mr. C. Stacey. *Mr. R. D. Vaughan has joined* the Board of Crompton Instruments Inc U.S. The parent concern is HAWKER SIDDELEY.

★

Mr. Ron Bartlett has become senior director on the Board of AMEY ROADSTONE CORPORATION in succession to the late Mr. Bill Tokley. Mr. Eric Hope has been appointed a director. Mr. Bartlett joined the group in 1940 and has been on the main ARC Board since 1970. Mr. Hope came to ARC last year and is chairman and managing director of AR Construction.

★

Mr. Peter Dorling has been appointed assistant managing director of RANSOMES SIMS AND JEFFERIES. He joined the company as chief buyer in 1958.

★

Mr. Barrie Heads and Joyce Wooller have been appointed to the Board of GRANADA TELEVISION. Both joined Granada in 1956. Mr. Heads became an executive director of Granada Television in 1967 and managing director of Granada Television International in 1968. Joyce Wooller is director of programme services.

★

Mr. Michael B. Edwards has joined the COMPAIR GROUP as director of organisation development.

★

Mr. H. M. Scopes has been appointed to the board of ICI petrochemicals division—as raw materials and purchasing director.

★

Mr. Graham Willett, on reaching his retirement age, will be leaving his present position of general manager and aviation underwriter of the ORION INSURANCE GROUP from September 5. Mr. Stuart Peel, at present deputy aviation underwriter to Mr. Willett, has been appointed to succeed him as aviation underwriter.

★

Mr. Kurt W. Ziegler, based in WELLS FARGO BANK'S Frankfurt Germany representative office, has been elected a vice president of the bank.

★

Mr. Raymond J. Davies has *joined the board of* ABBEY LIMITED. He is managing director of Abbey Homesteads (Group), the parent company for UK operations.

★

Mr. John D. Milne, general manager—corporate banking, of ANZ BANKING GROUP, has been appointed a director of the bank.

★

Mr. D. C. Lindsay, group managing director of WHATLINGS, has been appointed chairman. Mr. Ian Robertson continues as deputy chairman. Mr. James Robertson has retired as chairman of the company and its subsidiaries but will continue as a non-executive director.

★

The BANK OF ENGLAND states that Mr. Eric Davey, at present second auditor, will become agent at the Newcastle Branch from May 21 to succeed *Mr. H. J. Mason,* who is retiring.

★

Mr. Robert Butler has retired as executive chairman of EUTECTIC COMPANY and remains chairman of the board. Mr. David D. Searle is managing director.

★

Mr. G. C. Castle, formerly manager, organisation planning, Ford of Europe, has been appointed controller of personnel at MIDLAND BANK INTERNATIONAL.

Mr. G. C. Castle

★

Mr. Michael J. Bancroft has been appointed to the board of MEARS CONTRACTORS as deputy managing director. Mr. Bancroft has been a director of Amey Roadstone Construction since 1972.

★

Captain John Trechman has succeeded Mr. Ron Smith as chairman of the CORPORATE RESPONSIBILTY CENTRE and Mr. Peter Walker has become development director. Captain Trechman recently retired from IBM United Kingdom.

Arms and the mandarins: the British way of selling defence equipment abroad

BY ROBERT COTTRELL

A STREAMLINED British Government sales structure for defence exports is being hammered out in Whitehall. At the heart of the debate is the future role of International Military Services (IMS), a limited company whose shares are wholly-owned by the Ministry of Defence (MOD).

IMS is one of the lesser-known elements of Her Majesty's Government. It receives, for instance, no mention in this month's statement on the Defence Estimates. It breaks cover in Sir Leo Pliatzky's January report on non-departmental government bodies "quangos", but with its £244m turnover in 1978 curiously classified as "gross expenditure" alongside the nugatory administrative expenses of running military museums. IMS is, however, well enough known to the dozen or so foreign governments which have filled its current order book with some 40 contracts worth around £600m.

Past projects undertaken by IMS have included a military industrial complex at Isfahan, Iran, geared to the production of ammunition and spares for the Chieftan-type tanks ordered by Iran. Informed estimates put the projetced cost of Isfahan, undertaken jointly with John Laing and George Wimpey, at some £770m, but work ceased with the Iranian revolution. The company does not discuss current orders: but these are understood to include a major military support equipment deal with Saudi Arabia.

Strange beast

IMS is a strange beast, a governmental griffin combining two distinct persona. It is a limited company, bound by the Companies Acts, owned by central government. It finances and accounts on commercial principles, but substitutes government guarantee for adequate capitalisation. It is bound by government policy guidelines, but has the obligations of commercial and proprietary confidence. It acts with the authority of the Government, but has the commercial attitudes and flexibility of a small, aggressive company.

IMS has grown during the last decade from a £4m contracting company within the Crown Agents to a £250m annual turnover defence lead contractor for MOD. Its special skills are in assembling complex defence packages comprising such elements as weapons and spares supply, civil engineering, personnel training, insurance, and after-sales service.

There are commercial winds blowing through the MOD, and IMS looks well placed to benefit from them. Lord Strathcona, Minister of State at MOD, said i na recent interview that, in the past, British arms sales "did lose out to the French because we took a more moral point of view . . . I hope we give the French more of a run for their money." In a Parliamentary question last February, Mr. Francis Pym, the Defence Secretary, told Mr. Jack Straw, MP, that "an examination of alternative arrangements for the organisation of some defence sales work is in hand with a view to removing part of the activity from the defence votes and of developing a more commercial approach."

The formulation of a more commercial structure for defence sales would involve redefining the relationships between three parties all controlled by the MOD:

● The Defence Sales Organisation (DSO) comprises civil servants within the MOD, engaged in high-level sales negotiations: sales and supply: and associated contractual and financial supervision. tIs total sales are probably in the region of £200m a year.

● International Military Services may be seen to overlap with DSO in certain sales areas. Its turnover will probably be around £250m-£300m this year, and it derives much of its work from sales openings made and then allotted to it by DSO, often with an eye to its turnkey skills. It has a handful of its own agents.

● Royal Ordnance Factories (ROFs) are weapons manufacturers, whose promary customer is the British Army. Turnover in 1979 was £284m). Almost all export output goes through DSO, which acts as middleman between ROFs and IMS.

If an enlarged role for IMS's commercial expertise is accepted, then it might logically be expected to assume from DSO the bulk of the latter's sales supply work, leaving DSO as an essentially high-level government-to-government negotiating force (manned by "king-talkers," as the elite salesmen are called) with some marginal sales supply functions. The second and related re-orientation would be to formalise IMS as the ROFs' sole export outlet, with appropriate commercial relations between the two bodies.

The prime function of DSO which might be integrated into IMS are those relating to the sales of new ROFs' peduction. DSO would retain its responsibilities for the sales of surplus warships, naval supplies, military surplus stores within the UK, design sales and product licensing, and army-related technical advice, though these last two might be transferred in time.

The assumption of DSO functions would of necessity bring IMS into a direct relationship with ROFs. But one precondition for fully commercialising trading between the two parties which might be uncomfortable for a cash-conscious government would be the one-off capital injections required.

At present, as Mr. Pym observed, the defence vote effectivly funds much arms exporting. ROFs are "paid at the gate" by DSO for their products out of the defence vote, while DSO waits an average of six months to be paid in turn by its customer. ROFs have a trading fund to cushion cashflow, but would probably require perhaps £100m to £150m to move working capital over to the requirements of potentially large and irregular export orders, with associated speculative stocking. IMS in turn would probably need some £30m to finance its expanded role as a principal.

During an administration committed to trimming the Civil Service and the resurgence of commercial criteria, there are clear attractions in switching work out of DSO and into IMS. IMS, says its chairman Sir John Cuckney, "ought to be able to be more commercial in its marketing efforts under MOD broad guidelines, ought to be more effective than civil servants can ever be, by virtue of their experience and training, and by virtue of the limitations which must be imposed on civil servants engaged in commercial operations. One could well say that for them to engage in commercial operations and be in effect profit-motivated presents major contradictions, and perhaps not desirable ones."

Opportunities

The question now, says Sir John, is "whether we can maximise the role we play in the national interest. It is really a question of whether one can maximise and exploit a number of opportunities and developments which in my opinion can best be done through a more commercially structured and motivated organisation like IMS than through central government."

That such a question should apparently have been under debate since last spring (when the Iranian revolution deprived IMS of 90 per cent of its markets and ownership was transferred from the Crown Agents to MOD), says much for the sensitive nature of a package of issues combining arms, jobs and money.

The *defence* business, unlike say the building of shcools or hospitals, is a highly sensitive area, in which a company like IMS can offer quite specific advantages. It can serve to insulate the British Government from periodic public concern about arms sales by placing it at one remove from the market place. Commercial and proprietary confidences held by IMS relating to its contracts are subject ot company law, as are its legal obligations to third parties.

IMS has always operated within Government guidelines, accountable to the MOD, its owner. Any "devolution," of defence sales which might take place is therefore one of operations and not responsibilities. Nonetheless, IMS's commercial momentum—jobs and profits—may sometimes have to be set against political considerations.

Defence-related British exports will be worth around £1.2bn this year. Defence industries provide around 1m jobs and arms sales are one of the few areas which can expects undiminished demand in recenession years.

THE UPS AND DOWNS OF THE BUSINESS

International Military Services was incorporated in 1967 as Millbank Technical Services, a subsidiary of the Crown Agents. Millbank was to act as a principal in overseas contracts, by no means all defence related. The Ministry of Defence found MTS's skills in assembling multi-disciplinary projects made it an attractive vehicle for the Iranian military contracts which began to be placed in the early 1970s. The nature of Millbank's business was such that, in 1977 control passed to the MoD, though the Crown Agents continued to hold the shares, and in June 1978 it adopted its rather more descriptive current name. The MoD took over the shares in January 1979, at a time when it was clear that Iranian business, which made up 90 per cent of IMS's markets, was at an end.

It was not until January this year that IMS could get a cuear enough picture of its financial state to file accounts for 1978, into which were taken all matters contingent on the Iranian revolution. The effect was a £12m loss—roughly equal to 1977's pretax profit. Reserves slumped from £15.7m to £2.2m, though the company retained liquidity throughout the crisis. The 750 expatriate employees were successfully evacuated from Iran, stripping IMS down to 150 staff, now rising towards 200.

Within a year the company had built up its business in new markets, and is likely to show a profit of some £6m on a similar £240m-£250m turnover when 1979 accounts are filed.

Chieftan tank: there were large orders from Iran.

FINANCIAL TIMES SURVEY
Wednesday April 23 1980

European Machine Tools

Machine tools are at the core of most manufacturing industry and if recession becomes a serious fact of economic life, then the outlook could be bleak. This survey weighs the balance of pros and cons.

Doubts about the future

By Hazel Duffy
Industrial Correspondent

MACHINE TOOLS are a vital element in the development and advancement of industrial processes, which gives them in some ways a far greater significance than would be suggested by value and volume of output alone. Almost every product has, at some stage of its manufactrue, been shaped or cut by a machine tool.

The variety of jobs performed by *machine tools* has been matched by the spread of types of machine tool, and this has ben an important influence in shaping the structure of the industry. There are, of course, standard machine tools which can be turned out by the thousand, but at the other end of the scale is the highly sophisticated machine which is designed for a particular customer and manufactured in close co-operation with him.

This is not an industry, however, which *lends itself to mass* production techniques, even for *standard machine tools*. *Consequently*, many of its member companies throughout the world are relatively small, and have retained a degree of flexibility *which has* been *proved* very necessary during periods of highly cyclical demand. The trouble is that smaller companies cannot always find the resources to spend sufficient money on developing their products. In most developed countries, the industry has gone through severe bouts of rationalisation over the past 20 years as it has found itself having to adapt, often painfully, to the requirements of its customers.

The industry is currently in a state of extreme uncertainty about future demand. As the Western world teeters on the brink of a recession whose length and severity nobody can predict, there is understandable concern about levels of capital spending and the associated need for machin tools. Most countries have experienced surprisingly buoyant demand over the past couple of years, but few machine tool manufacturers could say that they look forward to the first years of the 1980s with real confidence.

Unable

The U.S. market has been particularly good, partly as a result of increased industrial activity generally and more specifically thanks to the retooling programmes of the motor and aerospace indusries. American machine tool manufacturers have been unable to meet this huge expansion in *demand, and many companies are quoting 18-months' delivery periods to prospective customers.* The industry itself argues that this is because it has shrunk in the absence of Government incentives for capital *spending—the* Federal *measures* expected to come into force shortly have come far too late to preserve large parts of the industry, says its trade association.

American industry has traditionally tended to by U.S.-made machine tools in the past, particularly for their sophisticated *requirements. It has come as* something of a shock, therefore, for it to find that it has been necessary to go overseas more and more, and that it can source advanced technology machine tools from outside the U.S. as well as within. Japan is the country which has benefited most from this expansion in the U.S., but many European companies have also done well.

Machine tools are a product which has tended to lead to a fairly high degree of international specialisation. Thus Britain has traditionally exported a large number of grinding machines, the German industry a number of sophisticated machine tool categories, and the Italians similarly have built up pockets of success. At the same time exports have been an important element in offsetting demand troughs in the homemarket, and the tamount of international trade in this industry is considerable. In 1978 world machine tool production totalled \$18.6bn, and world trade in machine tools comprised \$8bn of exports and \$6.2bn of imports.

There are several factors *which could alter the current* pattern of international trade. These include the following.

WORLD MACHINE TOOL PRODUCTION AND TRADE
(estimated 1979 figures \$m)

	Production	*Exports*	*Imports*
West Germany	4,100	2,460	541
U.S.	3,890	660	1,060
Soviet Union	2,892	350	800
Japan	2,698	1,114	155
Italy	1,386	699	265
UK	1,106	468	575
France	918	480	352
East Germany	*806*	*662*	*244*
Switzerland	797	678	140
Poland	685	191	518

Source: American Machinist, February, 1980.

First is the emergence of Japan as a big exporter of machine tools, particularly of the numerically controlled type, which is a growth area worldwide. Japan has already made big inroads into the U.S. and is starting to do so in Europe. In some products there is real concern that *home-based manufactures* can ever make much of an impact.

Although Japanese industry, and the car industry in particular, have large spending programmes for new capital equipment, it is clear that machine tool capacity will produce a large surplus over home demand and that Japan will continue to exercise a considerable influence on the industry worldwide.

Second, the Comecon countries, including the USSR, have been very good markets for European machine tool companies in recent years. Orders have come frequently on the back of big projects carried out by Western companies, such as the motor-car factories built or expanded with the help of companies like Fiat, Peugeot-Citroen, etc., and the Massey Ferguson tractor factories in Poland which brought big orders to the U.K. machine tool industry.

Emergence

The uncertainty over U.S. policy towards export of these products to the Soviet Union, and the expected slowdown in capital expansion projects in Comecon countries generally, could threaten this valuable trade. West Germany is the biggest exporter to Eastern Europe and the USSR, but all the other major European producers have also done well.

Third, the emergence of machine tool industries in developing countries threatens to intrdue on markets traditionally supplied by the developed world. Countries which already have sizeable machine tool industries include India and Spain, while others which intend expanding into international status include Korea, Taiwan, and probably China. For the moment, the equipping of these industries with machine tools is attractive to the developed countries, but they are aware that in time they will have helped to build up competitors.

These *factors* may not all be adverse as far as the Western countries are concerned. Japan is anxious to set up manufacturing facilities in Europe, as *it has already done in the U.S.* If this follows the pattern set by the American companies which have set up in Europe, and particularly in Britain, it may well make a welcome contribution to the health of the industry as a whole.

The growing acceptance of computer-controlled machine tools, however, poses some threat to the industry generally. The fact that these machines do the job of perhaps four ordinary machines immediately means that demand is reduced in terms of numbers. Furthermore, the pricing of NC machines is becoming increasingly competitive so that the value will in many cases be less than it would cost to re-equip with manually-controlled machines.

Nevertheless, companies which are not making specialised types of machine tools cannot ignore the challenge that has been posed by NC. Many of the machine tools on show at Mach 80 (which opened yesterday at the National Exhibition Centre, Birmingham) will be of this variety, and there will also be examples of automated machining processes whereby these machines are automatically linked up to carry out whole assembly tasks.

The advent of the microprocessor is having a very big impact on this traditionally somewhat conservative industry. *It is certain that the technical* achievements to date will be overtaken on a rapid scale in the future, making it imperative that the industry finds the *resources to go along with the* developments being made by electronics companies.

To some customers, the array of computer controlled machine *tools is bewildering. There has* almost certainly been a tendency for industry to buy machines which are more sophisticated than needed, or *simply cannot be justified* by the amount of work that is needed of them. It would not be surprising to find a growing business in consultancies offering *to give impartial advice* on expensive purchases.

Programmes

The future of the machine tool industry, as in most other branches of engineering, lies very largely with the rate of industrial growth worldwide. The spending programmes of the motor industry is forecast to continue in the U.S., Europe and Japan for two or three more years yet, although there must be some doubts as to the ability of companies to fund this retooling if car sales go into decline as they have in the U.S.

Similarly, the aerospace industry can be expected to continue retooling for some while in the light of the new generation which is planned. Elsewhere, capital spending will depend very much on the length and severity of the recession.

As far as products are concerned, the shift to standard machine tools being produced in low-cost countries must continue. This will make all the more important the resourcefulness of the industry to come along with new developments. Some forecasters say that 50 per cent of the value of machine tools will be NC and computer-controlled by the mid-1980s, and there will be growing demand for developments in the area of inspection systems, robotics, and the movement towards automated system generally. It would be surprising if there was not considerable rationalisation and reorganisation throughout the decade in order to meet these challenges.

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EUROPEAN MACHINE TOOLS II

U.S. demand dominates world trade

EARLIER this year Komatsu of Japan received inquiries from General Motors and Ford for the supply of a large number of presses needed as part of the U.S. industry's re-equipment programme. It was unusual for these two companies to look outside the U.S. for their machine tool requirements, but the domestic industry was too full of orders t o meet the delivery times.

Cincinnati Milacron, the largest U.S. machine tool manufacturer, has been reporting spectacular increases in its order intake, mainly resulting from the huge capital spending programmes now under way in the American motor and aerospace industries. At the end of the third quarter of 1979 this company's order backlog reached $665m, almost 50 per cent higher than at the same time in the previous year.

International trade in machine tools over the past two years has been dominated by the enormous demands placed on the world industry by the U.S. Airline re-equipment programmes have brought a surge of new business to the aircraft builders and their suppliers, with the result that they have been scouring the world for materials (such as titanium) and for machine tools and other capital equipment to increase their capacity. In the motor industry the headlong switch to small cars, imposed partly by high fuel prices and partly by Federal regulations, has had similar consequences.

Dramatic

The effect on the U.S. machine tool companies has been dramatic. In 1978, for example, motor industry orders for Cincinatti Milacron's precision grinders rose by 61 per cent, while orders from the aircroft makers for computer-controlled profilers rose by 160 per cent.

These developments have created great opportunities for foreign suppliers of machine tools, especially but not exclusively the Japanese. As Table I indicates, the share of imports in U.S. machine tool consumption had been edging upwards in the 1960s and the early 1970s, but it is only recently that the proportion has climbed above 20 per cent. The most remarkable change took place between 1977 and 1978, when imports of machine tools rose from $482m to $832m and the U.S. became a net importer of machine tools for the first time.

Although West Germany had traditionally been the major supplier of imported machine tools to the U.S. and is certainly sharing in the re-equipment boom now under-way, it was overtaken in 1977 by Japan. In 1978 Japan supplied machine tools to the value of $221m, against West Germany's $155m. The next largest supplier was the UK with $75m. In 1979 the U.S. was again a large net importer of machine tools. According to *American Machinist* figures, the U.S. last year overtook the Soviet Union as the largest importer of machine tools.

Protectionist

The impact of Japan on the U.S. machine tool market, though less obvious to the general public than in cars or TV sets, has reached the point where fears of a protectionist response have begun to influence commercial decisions. Several Japanese machine tool companies have decided to set up manufacturing operations in the U.S. Yamazaki was the first to take the plunge and other companies, including Ikegai, Hitachi Seiki and Makino Milling, are reported to be planning similar moves. There are, of course, marketing as well as a political advantages in being sited near to the major customers; some components and ancillary equipment can be bought more cheaply than in Japan.

The rise of Japan as a major force in world markets has been the major development in world machine tool industry over the past decade. As Table II shows, Japan's share of world machine tool exports has been advancing steadily over the past decade until it is now the second largest exporter after West Germany, ahead of Switzerland, Italy and the U.S.

In the past few years North America has accounted for about a third of Japan's machine tool exports, the Far East for about 22 per cent and the Comecon countries for about 15 per cent. Partly to reduce their dependence on the U.S., Japanese companies have been seeking to strengthen their position in Western Europe, sometimes in association with local machine tool companies.

Another major source of business in recent years has been the Soviet bloc. Although the Soviet Union is a major producer of machine tools, it is also a very large importer. Non-Comecon countries, especially the West Germans and Japanese, have supplied large quantities of sophisticated machine tools for the motor industry and other consumers. In 1978, for example, the Soviet Union was easily the largest outlet for West German metal cutting machine tools, taking equipment to the value of $212m; the next largest markets were the U.S. ($96.4m) and the UK ($96.3m).

The Soviet Union was the largest single market for Italian machine tools in that year, while France's biggest customers were Romania and the Soviet Union. The share of the U.S. industry in the Comecon market has tended to slip in recent years, partly because of political obstacles; the latest flare-up over Afghanistan will tend to strengthen this trend.

The world machine tool industry is characterised by a high degree of international specialisation. This is likely to be accentuated as developing countries like India become more significant exporters of standard machine tools; even China is beginning to participate actively in international trade. Manufacturers in the advanced countries have had to respond to this competition by making a bigger commitment to sophisticated equipment, including numerical control and computer control.

Yet a striking feature of this industry has been the ability of medium-sized and small companies, by specialising in a particular type of machine tool, to maintain a reputation for technical excellence. For the more advanced machine tools there are usually five or six (sometimes fewer) manufacturers which are known to be the leaders in that particular market and it is extremely difficult for outsiders to dislodge them. There appear to be no great advantages in being able to offer a large portfolio of machine tools from a single source.

Thus the Italian industry, which has a particularly good record in exports, consists largely of smaller companies. Similarly in West Germany, which is overwhelmingly the largest exporter of machine tools, there is no strong move towards the creation of larger companies. In the U.S. there have been some structural changes in the last few years, apparently prompted by the need for larger resources to develop new technology. One example was the merger between Cross, a leading supplier of high-production equipment for the motor industry, and Kearney and Trecker, although this is being contested by the antitrust authorities. Last year another leading U.S. machine tool company, Warner and Swasey, was taken over by Bendix, a diversified engineering group with substantial machine tool interests.

Located

Partly because of the structure of the industry, the trend towards multinational investment, in the sense of the leading companies having plants in all the major markets, is less marked than in concentrated industries like motor cars or farm machinery. It is true that some of the U.S. companies have manufacturing subsidiaries or associates in Western Europe—and there are a few cases of investment in the reverse direction—but for sophisticated and expensive equipment buyers are prepared to go to the supplier who has the best product wherever he may be located.

Geoffrey Owen

TABLE I: MACHINE TOOL IMPORTS AS PERCENTAGE OF DOMESTIC CONSUMPTION

	U.S.	Japan	West Germany	UK	France
1960	5.4	31.1	19.6	21.4	na
1965	4.2	17.7	17.8	25.7	na
1970	9.1	13.6	23.8	28.7	na
1975	13.8	14.2	27.8	37.7	48.0
1976	14.9	9.3	27.7	40.8	na
1977	15.6	8.0	30.9	45.0	47.0
1978	21.4	8.2	29.9	47.0	47.0

Source: NMTBA and national statistics.

TABLE II: SHARES OF WORLD MACHINE TOOL EXPORTS

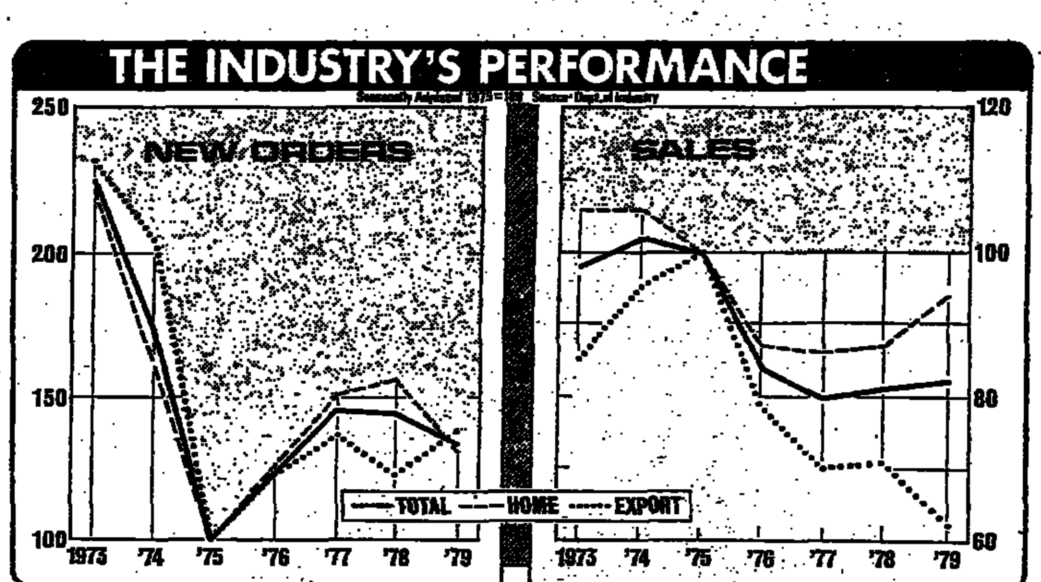
(per cent)

	West Germany	Japan	Switzerland	U.S.	Italy	UK	France
1973	39.8	7.2	10.4	12.0	8.0	7.3	6.3
1974	40.3	7.9	10.3	12.6	8.2	6.4	6.1
1975	37.8	6.7	9.5	12.5	9.3	7.8	6.9
1976	37.7	8.2	10.3	12.5	8.2	7.2	6.1
1977	36.5	12.6	10.2	9.4	9.0	6.7	5.5

Source: U.S. Commerce Department. The figures refer to shares of total exports from 14 major producing countries outside the Soviet Bloc.

One of two identical 8-station rotary transfer machines purpose-built by Mechanised Assembly (a member of the Deritend Group) for a Romanian customer

UK industry strengthened by adversity



THE UK machine tool industry enters the 1980s beset by a number of uncertainties, despite the confidence with which the Mach 80 exhibition is being launched. A recent report commissioned by the Machine Tools Trades Association, the industry's representative body, forecast a probable decline in orders of around 20 per cent over the next four years. Furthermore, the forecast from the Henley Centre, expects the trend of export by the British machine tool industry to continue declining, while imports will continue to take a growing share of the British market.

If this forecast sounds overwhelmingly gloomy, it must be said immediately that the industry has some very good companies which have the capability and resources to survive the changing demands being put on them. In fact the difficulties of the past five years have done much to stimulate the creation and re-organisation of groups of companies which have been strengthened as a result.

Into this category fall some of the largest manufacturers, including the machine tool interests of Tube Investments, John Brown (the Wickman group), Staveley and B. Elliott. The last has expanded through its acquisition of Newall, and more recently, the Herbert-Churchill grinding interests. The perennial problem remains Alfred Herbert, which looks destined to re-group its stronger elements in order to concentrate on advanced technology, while disposing of its other interests.

Capacity

The American-owned sector of the industry is an important element. It includes Cincinnati Milacron, Cross, Warner and Swasey, Adcock-Shipley, Giddings and Lewis-Fraser, Landis Lund, Dean, Smith and Grace, which together probably account for around 30 per cent of UK output. In some cases they have provided valuable extra capacity for their U.S. parent companies which have been unable to meet all the requirements arising from the motor and aerospace industreis' re-tooling programmes in the U.S. Most of their production, however, is geared to the UK and other European markets.

The British industry covers a wide range of standard and specialised machine tools. Sometimes these interests are represented by companies which are part of the same group. The 600 Group, for instance, the largest machine tool manufacturer in the UK, includes, in Colchester Lateh, probably the world's largest manufacturer of standard lathes. Other companies in the group, such as Hydro, make machine tools which come into the advanced technology bracket. A large number of smaller indepedent companies also continue to meet the needs of the industry's main customers, both for standard and specialised machinery.

The major theme of Mach 80 is product development, a vital aspect of today's machine tool industry. The complexity of machining requirements has led to growing international specialisation in their production. The investment programmes of the motor industry in the UK, fror instance, are believed to have been an important factor in the jump in imports from Germany high level of imports in 1979. A and the U.S. was recorded, mostly in items such as transfer lines and hydraulic presses, for which there isa limited production capability in the UK.

Motor industry investment is a key determinant in machine tool demand. In the past couple of years the UK has benefited in particular from the Ford engine plant at Bridgend, while BL has also been investing fairly heavily. But there is obvious concern about the future of the motor industry in the UK and the effect that this will have on the machine tool industry. At the same time, it is not always healthy for the latter to fall back on the argument that it cannot produce every type of machine tool requirement in this countr, particularly for the specialised needs of the motor industry. A recent example of a venture designed to overcome a product gap in the British industry was the co-operation agreement between Wilkins and Mitchell and Hydraulic Engineering to build a large power press not previously available in the UK.

The National Economic Development Committee (NEDO) on the machine tool industry has done some valuable work in researching customer needs and the inability of the industry to meet them. It noted recently that the import value of grinding machines, a product where the UK is strong, had reached £20m in the first seven months of 1979. An increasing number of gaps in type, size and technological sophistication were identified, as well as pressure from low-cost imports.

Similarly, the UK has been slow to meet the rapidly growing demand for numerically controlled (NC) lathes and machining centres. Imports of NC lathes accounted for probably 10 per cent of total imports of machine tools last year, worth about £25m. Japan was the largest single supplier by volume, and is prominent in the production of smaller lathes retailing for a little over £30,000. West Germany exported NC lathes to the value of nearly £11m, slightly higher than Japan, but the machines are much more expensive and therefore fewer in number. U.S. exports were around £2.7m.

In the past couple of years several companies in the UK have started manufacturing NC lathes and the total is now 16. They include Alfred Herbert, TI Churchill, Warner and Swasey, Webster and Bennet, and the 600 Group. The Japanese have built up a very strong position in this product, in the U.S. as well as in Europe, and it will be very difficult to dislodge them. The opportunities for UK companies must be more in the larger and more specialised NC lathe.

Weaker

The situation with NC machining centres, another product which is enjoying considerable demand growth, is much weaker for British companies. The NEDC calculates that only 50 per cent of UK demand is being met by home suppliers, and that imports have risen from less than £6m to £9m in the past two years in spite of growth in the UK industry's own supply.

Kearney and Trecker Marwin (KTM) is an important UK producer of machining centres, as well as other specialised machine tools being sold to the automotive industry. KTM, one of the first companies to make NC equipment, suffered from the classic problem of being ahead of its time technologically. But the company now seems to have settled down to a more stable existence under the ownership of Vickers. The Wickham group (part of John Brown) is another major manufacturer of NC turning machines and machining centres, while TI Matrix introduced a new machining centre recently, which was designed to offset the highly cyclical nature of its traditional grinding machines.

The growth in imports of machine tools is also being experienced in other developed countries which have well-established machine tool industries, notably in West Germany and the U.S. Many British companies have won orders recently from the U.S. and this is thought to be the main factor in the surprising resilience in the UK industry's exports in the latter half of 1979.

Investment in product development has received some encouragement from the aid scheme devised by the last Government, although it looks as though the final take-up will be a good bit lower than the £30m set aside by the Department of Industry (DoI). Besides advances in NC technology, visitors to Mach 80 will also be looking for developments in automated assembly and electro-discharge machinery, both areas which have received help from the DoI.

As well as products, the UK industry also has to demonstrate that it can match the pricing, delivery dates and after-service of its competitors. A prime improvement is in the area of productivity, where the industry has a poor showing in relation to other sectors of engineering. Investment in new machinery and buildings by the industry should also have increased as a result of the aid scheme, but many machine tool factories still have a long way to go if they are to survive through the 1980s.

Hazel Duffy

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Vehicle manufacturers the biggest users

THE MOTOR industry has for many years been the biggest user of machine tools and associated equipment. The investment programmes of the car and truck makers have a two-way impact on the machine tool industry—first, the assemblers themselves need new equipment, and secondly, their component suppliers often have to go out and buy new machine tools too.

Investment by the motor industry tended to be cyclical until the oil supply crisis gave its its first jolt in 1974 and another last year.

Five years ago the "average" American car was getting only 13 miles to the gallon of petrol. The Federal authorities decided that situation just had to change and introduced legislation that will force the U.S. car makers to make a dash to get fuel-efficient vehicles on the market. Care are being regulated by CAFE, or Corporate Average Fuel Economy, which insists that a manufacturer's entire fleet must meet a fixed average fuel consumption figure. This started in 1978 at 18 miles to the U.S. gallon (there are 1.2 U.S. gallons to the Impehial gallon), moved to 19 mpg last year and is set at 20 mpg this year. It then goes up steeply in two miles-a-gallon jumps until by 1983 the law requires American manufacturers to reach a fleet average of 27.5 mpg (33 miles to the Imperial gallon).

Confronted

The penalty for missing the target is $5 for each tenth of a mile or $50 a mile. Any manufacturer with a large fleet which misses the CAFE figure by very much is instantly confronted with fines totalling millions of dollars.

The American authorities did not want to take the risk that the lightweight cars the industry must produce to meet the CAFE regulations would be less safe than cars currently on the road.

So the manufacturers have also to meet stringent safety laws. And on top of all that anti-pollution regulations are gradually being tightened.

To cope with this task the American manufacturers are having to bring completely new ranges of cars to market. They have to invest come what may. This year may prove a recession year—it started with 125,000 lay-offs in the U.S. motor industry—but the spending goes on.

In all, the U.S. industry reckons it will have had to invest around £50bn in the seven years from 1978. That is three times what the U.S. space programme cost. As a result, these companies which supply the motor industry with machine tools and other equipment have been working flat out for some years.

The international nature of the machine tool industry means that it is not only the U.S. machine tool industry which has benefited. The American car makers have been buying from companies in other parts of the world with well-developed automotive industries—mainly Western Europe and Japan.

It is not only the U.S. which has felt the cold blast of the energy crisis. In Europe too car manufacturers are working hard to get lighter, safer, less-polluting and more fuel-efficient vehicles on the roads by the mid-1980s. They are investing heavily.

For example, Ford or Europe has a £2.5bn five-year investment programme to revamp its cars, trucks and engines. That does not include the cost of any new facilities, although it seems likely the group will go ahead with a new assembly plant before 1985.

General Motors, painfully aware that its record outside the U.S. cannot match Ford's, has already announced its expansion programme for Europe. GM will spend around $13bn world-wide during the 1980s, which include a $2bn European project to site an assembly plant and a components plant in Spain and an engine factory in Austria. On top of that five more component plants—three in Spain and one each in Northern Ireland and Austria—will cost a further $500m.

Such is the competitive nature of the motor industry that even those companies which cannot on the face of it afford to be investing heavily at the moment are having to do so to make sure their rivals do not leave them too far behind.

In Italy Alfa Romeo is talking of expansion in association with Nissan, the Datsun group of Japan. In Britain BL has a capital expenditure programme of more than £200m a year. It is no coincidence that both companies are State-owned. Both the Italian and UK Governments hope to preserve and rebuild a vital industry.

The State-owned companies naturally enough prefer to buy machine tools from local manufacturers when that is possible.

So BL can claim it has managed to "Buy British" machinery to a considerable extent—more than 80 per cent from UK-based suppliers. In 1979 BL ordered 530 machines and nine out of ten of them were sourced in Britain. The purchase was worth £43m altogether.

The names on the list of BL's suppliers have a familar ring. There is Kearney and Trecker Marwin, Alfred Herbert, Wickman and Frederick Pollard. Among the U.S.-owned companies which set up UK subsidiaries to service the American car makers when they moved to Britain the list includes Ex-Cell-O, Cincinnati Cilacron and Cress International.

It is politically prudent for any motor manufacturer receiving a large grant towards a project—either from the Government or local uthorities—to buy as much as possible from the country putting up the cash.

One obvious example is Ford's new engine plant at Bridgend in Wales. The group said that about half the equipment needed for the plant would be bought in Britain, which seems fair enough given that the UK Government is contributing an estimated £70m towards the £250m cost. In 1978, for example, Ford spent £90m on Bridgend, of which orders worth £45m were placed in the UK, £24m in the U.S. and £15m in West Germany.

Ford has some rules about ordering equipment which have simply had to be bent because the industry is on such a gigantic spending spree. The usual policy is that Ford does not want to account for more than 30 to 40 per cent of any one supplier's total output because "that's not healthy for them, or for us."

Ford provides a typical example of the way the liaison between the motor industry and the machine tool manufacturers operates.

Once any capital expenditure programme has been approved by the Board of the parent company in the U.S., Ford of Europe then feels free to inform potential suppliers about the plans. This is normally about three years ahead of the completion date for the project in question.

Within a few months of the decision to go ahead with a new model, for instance, the main suppliers likely to be involved are individually contacted, given fairly detailed information about the types of plant and equipment required, about the timetable and about what Ford is prepared to spend.

Potential suppliers is the UK, West Germany and the States all receive the same information about the same time.

Ford has organised itself as a European group rather than one based in one particular country, so purchasing is co-ordinated on a European basis too. One office in the UK and another in Germany share the task.

When selecting a particular item of equipment Ford looks first to see if the technology is right—will it do the job reliably?—and then to make sure it can be delivered to suit the timetable of the project for which it is required. Only at that stage does price become important when comparing one competitor with another.

But the fact remains that some German and U.S. companies won contracts for Bridgend because their prices were lower than the UK competition. On the other hand, Ford says that £4m of orders were turned away by British companies which said they either lacked the capacity or the special machinery or tooling required.

Ford claims that its experience has helped European machine tool companies win orders in the U.S. It encouraged some of its suppliers to compete for orders from Ford in the States, which is spending $20bn over five years.

One result is that Newall Engineering of the UK won a $3m contract to supply pin-grinding machines for Ford's Cleveland, Ohio, plant and this was followed with a $5m order for similar machines for Ford's facility at Winslow, Canada.

To get these orders Newall had to guarantee that there would be adequate back-up facilities—and indeed has put people into Chicago for this purpose. Ford UK was able to give reassurance to its American parent that Newall would make good its guarantee. Newall's sister company within the B. Elliot group, Keighley, has also won orders from Ford U.S., as has TI Churchill.

All this goes to show that the more intellectual the motor industry becomes the more the machine tool manufacturers must become international too—not necessarily to set up manufacturing plants in all major markets but certainly to have sales an dtechnical offices there.

There is so much work to be shared that no matter how much the British buy British, the Americans buy American, the French buy French, the Germans buy German or the Japanese buy Japanese, each will nearly always have to look outside their own country to obtain some of their machine tool requirements.

Kenneth Gooding

Technology reaches to the small man

ANYONE GOING to Mach 80 with cheque book in hand should compose his shopping list carefully, warns the Institution of Production Engineers in the current issue of its journal. This is not meant as a warning-off, however. It merely seeks to emphasise that there is more to buying machine tools than meets the eye—even in such a bewildering array as at Mach 80, a show where the machine tool industry is pulling out all the stops. Report has it that £10m is being spent to put £100m of hardware into the Birmingham shop-window.

There are several basic reasons for buying a new machine tool—to maintain capacity, add to capacity, reduce costs, or do profitably things that were not previously possible. Innovative technology can be an important factor in cutting costs. It is an essential factor to any manufacturer wishing to profit from the previously impossible.

One thing is certain — there will be "chips with everything." Microprocessors have taken over. With their aid CNC (computer numerical control) is becoming available to small companies as well as large. The Machine Tool Trades' Association says that British manufacturers are particularly active on this cost-cutting front, aiming to halve prices from the £100,000 to the £50,000 level.

CNC machine tools should appeal to small users on technical as well as financial grounds. Unlike the NC (numerically controlled) tools of the pioneering days, CNC machines can be programmed on the shop floor. They have an understanding of ordinary language and they do not have to be addressed in the arcane codes of NC. Nor do the modern machines have to be accompanied by boxes of electronics, as NC tools used to be. The control gear all fits snugly inside the machine. The single entity can be moved about and installed with correspondingly greater ease, despatch and economy.

Although the rising CNC generation is so accessible to communication between it and shop-floor personnel, man-machine introduction has still to be effected. Conducted on production machines the formalities can be counter-productive. An interesting item to be shown at Mach 80 is therefore a micro-processored CNC training lathe, claimed by Denford Machine Tools to be the first of its kind.

Priced at less than £20,000, and programmable for learning via a visual display unit, the Denford Micromaster could break into the thin-pursed education and training market. Because its price is so low, say the makers, they expect world-wide demand for it as a production machine too, despite its limited performance.

Nobody with experience of new technology would expect its application to be restricted to the low end of the price range. For the customer with plenty of space on his cheque there is what the trade calls DNC—direct numerical control—in which one central computer directs a number of machine tools.

Automated

DNC is not as far-reaching as the ill-starred Molins System 24, which ambitious engineers wanted to launch years ago, when computers were still fairly new candidates for automative duties in factories. The world was not yet ready then for totally enclosed machine tools, being loaded and unloaded automatically as well as doing their own tasks under automatic control inside an integrated manufacturing system. The spirit of the Molins system lives on in DNC and its variants, however. Automated machine shops are already a reality in several European countries, in the U.S., Japan and the Comecon bloc.

In Norway there is an experimental plant whose CNC machines work round the clock. Workpieces are palletised during the day so that nobody need work at night. The machine tools continue throughout the night unattended. If one of them breaks down during those "unsocial" hours a central computer redirects its work to another.

DNC systems will be exhibited by a number of firms at Mach 80. One of them, Kongsberg, will show its "programming centre" in action. The programming centre is a minicomputer equipped with interactive graphic facilities. Programs will be prepared on the Kongsberg stand while you watch the machine tools affected on colsed-circuit television. They will be scattered among the stands of Alfred Herbert, Kearney and Trecker Marwin and other machine tool makers. The programs will be transmitted along aptical fibre cables demonstrating their immunity to the electrical interference being propagated round about.

In the jungle of esoteric initials (pronounceable acronyms seem to be less well favoured by the machine tool fraternity than others) it is as well to recognise the different species. So you should know that when a few batchwork machine tools share a conveyor or manipulator or two, and when the combination is controlled by one computer, that combination is known as an FMS (flexible manufacturing system). When it can do without a crew it becomes a UMS (unmanned manufacturing system).

When the machine tools have their own numerical controls and do not get their programs fed into them on tape but are "instructed" directly by a central computer, going behind the tape-reader's back as it were, then the tape-reader is made redundant and the system proportionately more reliable. It therefore merits a new set of initials and is called a BTR (behind tape-reader) or RNC (remote numerical control) system.

The British Standard definition of a metalworking machine tool is as a power-driven machine, not portable by hand while in operation, which works metal by cutting, forming physico-chemical processing or a combination of these techniques. On that basis, manipulators and the like are not machine tools and are therefore referred to as auxiliaries. But Mach 80 is far from disregarding them on that account. The spotlight will fall on auxiliaries, too.

Robots

Among them will be the vitally important measuring devices. Even more dramatically illuminated, perhaps, will be the robots. But they will be seen in an appropriate environment. Thus one of the reduced-cost CNC machines on display, the TI Churchill 300 two-axis universal turning machine, will be found working in close collaboration with a robot.

Industrial robotos are not the humanoid artefacts of science fiction. Broadly speaking they are mechanical limbs. The most advanced of them are highly articulated, with analogues of shoulders, elbows, wrists and finger-joints. While at bottom they are vegetable, being rooted to the spot, above that they have a range of motion far exceeding that of human limbs. They beat humansin other ways, too, working tirelessly, consistently and efficiently in conditions that flesh and blood could not tolerate or survive.

Robots are programmable manipulators. Some can be programmed push-button fashion. Others can be "taught." If a human operator guides the "hand" of the robot through all the motions it is required to perform in a working cycle, the robot "memorises" the taks and thereafter repeats it endlessly on command.

In a typical machine shop working cycle a robot picks up a piece of metal, moves it into the right positions and attitudes for successive cutting, grinding or forming operations, and finally deposits the product where it is required. Such attainments notwithstanding, today's robots are rather senseless creatures. Research and development is expected to have changed this situation in a few years' time, when robots with tactile and visual sensors will have acquired enough artificial intelligence not only to handle component parts during manufacture but subsequently to assemble them as well.

Arthur Conway

EUROPEAN MACHINE TOOLS IV

Fears of imbalance in W. Germany

THE WEST German machine tools industry—the largest in Europe—has entered the new decade with mixed feelings. There is celarly a sense of relief that the industry is out of the mid-1970s doldrums but at the same time there is considerable foreboding about long-term prospects.

On the face of it manufacturers have little to complain about. Sales turnover started to pick up in 1978 and last year showed an average 7.5 per cent increase to take it well above the DM 8bn level. Allowing for price rises, this repersents a real increase of 3.5 per cent—still a significant jump. In many parts of the industry order books are full for the next few months and there is little reason to suppose that production will slacken dramatically this year.

These are perhaps not terribly significant generalities in an industry as diverse as machine tools—some segments such as metal saws have fallen on hard times (1.3 per cent growth in 1978) while others like wood saws and blades have reported 11 per cent growth in output for 1978. Production of wrenches and drilling and milling tools also saw a substantial increase while file output fell by 2 per cent. The figures for last year have not yet been released but manufacturers privately confirm that there are similar trends in 1979.

A mixed picture then, but—at least for this year—a healthy one. Yet this is precisely the industry's dilemma—the root of current growth is also the root of future problems. To be specific, domestic demand is continuing to sustain the industry but there is imminent danger of a structural inbalance in which the sector becomes over depenedent on vulnerable domestic customers. Export sales have been stagnating and year after year the industry has been driven backs to the domestic stalwarts—the motor and construction industries, both of which have been enjoying a boom.

Estimates

In 1978 export sales rose by 1 per cent to DM 4.9bn—in real terms a fall of 3 per cent. According to preliminary estimaets of VDMA, the association of German machinery manfacturers, machine tool exports rose by 3.9 per cent in 1979—representing a drop in real terms of about 1 per cent.

The reasons for 'this are common ot most of Germany's manufacturing nidustry. First, labour costs—which account for 45 per cent of machine tool manufacturers' total production costs—are extremely high compared to those in other West European countries. The metal workers' union has recently been awarded a 6.8 per cent wage increase; with other benefits, this will add an extra 7 per cent to machine tool manufacturers' wage bills and further erode profits.

At the same time little impetus was received—or can be expected this year—from the traditionally important customers in Comecon countries and the Arab oil-exporting countries. According to Commerzbank economic analysts, the Soviet Union (since 1973 the biggest customer for West German machine tools) and other East European customers such as Poland are unlikely to step up their imports since htey are approaching the end of their five-year plans and have considerable foreign exchange problems. The OPEC countries for their part are less willing to recycle funds the way of machine tool manufacturers than they were after the 1973 oil crisis.

The U.S., which takes 9 per cent of German exports, is also booking less from Germany, largely because of the dollar's recent weakness against the D-mark. While this phenomenon has hit every German sector active in the North American market—from chemicals to cars—the other concerns have been able to avoid some of the problems by investing directly in thet U.S. and setting up their own production bases. This has the advantage not only of avoiding exchange problems and of saving on labour and production costs; it also ensures that their market niche is not eroded and that design requirements are constantly kept abreast of shifts in U.S. demand.

This option is naturally attractive to machine toolmakers — but most German manufacturers are simply too small to adopt the strategy. Of the 400 machine tool companies only about 20 employ much more than 1,000 people. Of course, large concerns on the fringes of the machine tool business have not been slow to explore the possibilities of their use, if only to ensure that they do not fall behind in new techniques of numerical control. That at any rate was the logic underpinning AEG Telefunken's co-operation agreement two years ago with the McDonnell Douglas subsidiary Actron, which has been prominent in developing microelectronic controls for machine tools.

That is the picture then for German machine tool exports—further stagnation, determined by high production and labour costs, by a strong currency and by shrinking demand on traditional markets. German machine tool makers have weathered worse times as far as exports are concerned—but rarely have these problems been so closely linked to the uncertainties shrowding the market.

The major threat to the domestic reservoir of orders is in effect an offshoot of the problems afflicting export sales. Countries like Spain, Brazil and Poland are able to offer standard machines at much lower prices on the German market, thanks to their far cheaper labour costs. Imports rose by 11.5 per cent in real terms during the first three-quarters of 1979 compared with the corresponding period in 1978 and now account for a third of the German market against only a sixth in 1965.

The most important supplier of high-quality plant is Switzerland, with 30 per cent of all imports. Next comes Italy with 11 per cent, followed by France and Japan with 9 per cent each. Japan has overtaken the U.S., which now has 6 per cent of the market.

Meanwhile, the strength of the Deutsche Mark against several other major trading currencies has further eroded the Germans' price competitiveness. The yen, for example, fell 30 per cent against the D-mark last year, sharpening Japan's competitive edge in world markets, especially in the field of numerically controlled machines.

Inevitable

The fact of the matter is that there is not much standing in the way of further market penetration by imports. Smaller companies have tried their level best to keep prices down and stay competitive, but with rising fuel, raw material and labour costs, profit margins have been badly hit. Their only immediate hope is to rely heavily on the conservative purchasing habits of some major customers and to try and innovate as quickly as possible. In the long run it seems inevitable that imports will take an even greater share of the market and some of the medium-sized concerns will be forced to diversify or even go out of business.

Quite apart from the corroding effect of import growth at a time of export stagnation, there is concern among manufacturers that the industry is too dependent on too narrow a range of industries. Admittedly the motor and construction industries have served the machine tools sector well over the past four boom years. Indeed, orders from the motor industry are still growing at a relatively brisk pace and the repair sector is a stable bastion of demand. But all the signs are that production of cars—and to a lesser extent commercial vehicles—will drop quite sharply this year and stabilise at a relatively low level over the next two to three years. The boom is over—yet some of the smaller machine tool manufacturers are entirely dependent on the fortunes of the motor industry.

The construction boom looks like continuing a little while longer, but with higher interest rates and probable cuts in public works spending most analysts are reckoning with a serious slowdown towards the end of this year and the beginning of next. As with the motor industry, many companies cater solely for the machine tool needs of the building sector—and may thus have tough times ahead.

But all this paints perhaps too dark a picture of the machine tool industry. Agreed, there is strong import penetration, flagging export growth and an increasing vulnerability on the part of major domestic customers. But the domestic investment climate is healthy and Germany is still doing well even in difficult markets. It remians an efficient manufacturer, turning out reliable products and in many important spheres the world market leader.

But the key question is: how can the industry best retain its traditional advantages in a world of uncertain prices and sharp competition? There seem to be three main elements in the Germans' strategy for the 1960s. rationalise and to cut back on

First, they will continue to secondary support jobs while retaining the skilled workforce. Between 1973 and 1977 German manufacturers cut back their workforce by 13 per cent to about 970,000. With labour costs taking such a large slice of their budgets, itis seen as imperative to reduce the workforces to an effective minimum.

This has proved difficult for some producers as they are mainly family concerns with traditions of taking care of their employees. But during the difficult years after 1974 the banks bailed out a good deal of these family enterprises and it is clear that they can push their clients towards rationalisation measures.

The second prong of the German strategy is to gear up for innovation. This too is proving difficult for the smaller concerns, which feel they are often neglected by the Federal Research and Development Ministry when it comes to financing innovation. The banks, however, have generally proved co-operative about putting up cash.

Modernise

Some 60 per cent of the machines installed in Germany are more than 10 years old, acording to the machine tools association, while in Japan only 40 per cent of the machine tools are that old. It would require an estimated DM 13bn to modernise the German industry.

One major focus of R and D effort will have to be in new numerical control systems based on mini-computers. Greater use of micro-electronics would open the possibility of providing machine tools with an extended capability for switching from one product to the next with practically no down-time. In general the Government has been unable to invest any great amounti n micro-electronics and Germany has certainly nothing like the U.S. "Silicone Valley." This places a considerable onus on the large electronics concerns—Siemens and AEG—to provide the necessary R and D and to assess the needs of the machine tool industry.

The third line of German thinking for the 1980s involves straight - forward market analysis. Some manufacturers, for example, are becoming extremely interested in the do-it-yourself market which, in Germany at any rate, offers an expanding demand for simple hand drills and other machines.

Roger Boyes

U.S. becomes heavy net importer

THE U.S. machine tool industry is currently going through one of its cyclical booms; order books are bulging and backlogs extend to 18 months or more. This might lead one to suppose that there is little room for foreigners, but the opposite is the case.

The market is so tight that U.S. purchasers welcome with open arms anyone who can supply a piece of equipment with the minimum delay. So nimble foreign suppliers have been able to grab a good share of the business. Furthermore, the technological gap between the outside world and the U.S. is narrowing, so quality differentials have ceased to be the obstacle they once were.

European and Far Eastern machine tool makers have in fact been increasing their market share for some time. In the early 1960s foreign companies had only about 5 per cent. But by dint of persistence and imporved performance they built this up steadily over succeeding years. By 1966 their share had risen to 10 per cent and by the mid-1970s to 12 per cent. In the last four years the trend has accelerated. In 1977 it reached 16 per cent, and in the first nine months of last year it was just short of 20 per cent.

Heading

The value of foreign supplies in those nine months was $740m in a market whose annual value is about $5bn. Heading the list of suppliers was Japan, followed by West Germany, Britain, Switzerland and Taiwan in that order.

The strength of the foreign assault on the U.S. market hardly comes as a surprise. The attractions are enormous. It is by far the biggest and most lucrative market in the world. It also offers the biggest techological challenges. And lately it has also shown an impressive resistance to economic recession which is likely to persist for some time to come. (An indication of this was the recent surge in the share prices of machine tool making companies. Shedding their somewhat prosaic image, they became the market's glamour issues for a while, matching the performance of the much-followed oil stocks).

The tightness of the U.S. market results from several factors. The main one is the massive retooling programme going on in the U.S. motor and airline industries, which account for about half of all machine tool shipments in the country.

With Federally-mandated environmental and fuel-conservation targets to be met in the coming years, Detroit is scrambling to prepare production of smaller and more fuel-efficient cars. The deadlines have in some cases, proved too tight, and there has been ome slippage. Even so, the motor industry is in the middle of what is probably the largest retooling operation ever witnessed in the U.S. This means that whatever happens to the economy as a whole (including car sales, which have slumped in the last few months), the motor industry will give a stimulus to demand for machine tools for at least a couple of years.

There is a similar story in the U.S. aircraft industry, where giants like Boeing are gearing up to produce the next generation of passenger jets. Again, this is a major exercise since it involves setting up a capacity to produce aircraft which will satisfy the market for the rest of the century.

The move to greater energy efficiency is not, of course, confined to the motor and aircraft makers. Many other industries are going in the same direction, giving the trend a broad base.

A more recent bullish development is Washington's renewed emphasis on defence spending following the deterioration in relations with the Soviet Union. Although the impact will be less dramatic than that created by the motor and aircraft industries, the prospect of accelerated development and production of new weapons is good news for machine tool makers. Moreover, given the long lead times involved, defence may well add strength to the market just as the demands of the motor and aircraft makers start to tail off.

Proposals to reform the U.S. capital depreciation rules by accelerating write-offs should also spur industrial capital investment. Under new regulations all machinery would be depreciated in five years (20 per cent in the first, 32 per cent in the second, 24 per cent in the third, 16 per cent in the fourth, and 8 per cent in the last), compared to the somewhat arbitrary but longer periods now ruling.

If there are clouds on the horizon, they have to do with the likelihood that the U.S. economy will go into a steep recession which will damp down demand for machine tools from the cycle-sensitive industries. The current high rate of U.S. inflation also poses a threat to th market.

Inroads

The greatest inroads made into the U.S. by foreign companies has traditionally been in the lower technology goods, as shown by the relatively high level of shipments of lathes, drills and so on. The more sophisticated end of the market is still strongly controlled by the U.S. manufacturers. This applies particularly to electronically controlled machine tools, whose makers are able to draw on America's world lead in computers. Complex machine tools like machining centres are also dominated by the U.S. companies.

The machine tool market is highly segmented, however, and while the above may be true as generalisations, foreigners have made some impressive inroads with particular types of high technology equipment. The Japanese have done well with numerically controlled small lathes and machining centres, the British with grinding machines for the automotive industry.

Mr. Eli Lustgarten, machine tool industry analyst for Paine Webber Mitchell Hutchins, the Wall Street brokers, commented: "Foreign companies are producing more advanced machine tools now, and the percentage of the market going to them is increasing because the technology gap is not so wide. There is no question that this is something for the American companies to worry about."

Quite how worried probably depends on how well placed they are. For industry giants like Cincinnati Milcron the threat is there but not considered to be serious.

Mr. Clifford Meyer, the group's executive vice-president of operations, commented that in today's market there seemed to be room for everyone. But he added: "Is it a temporary phenomenon brought on by what is happening now, or will it de out? It depends on how well the foreign companies can service their clients." Some companies and countries, he concedes, have done "extremely well," but it is too early to judge the success of all of them.

Observers of the industry seem to agree, however, that the present tightness of the market offers foreign producers a rare opportunity to gain a foothold. If they can consolidate it by providing all the necessary back-up, they may even be able to hang on to it when things get tougher later on.

David Lascelles

U.S. TRADE IN 1979
($m)

	Exports	Imports
Metal-cutting machine tools	544.9	1,024.6
Metal-forming machine tools	333.8	241.9
Total	878.7	1,266.5

Source: U.S. Commerce Department.

French sales move into surplus

THE FRENCH machine tool industry typifies many elements of the new vitality which has flowed into the country's manufacturing sector over the past decade. Until two years ago it had always been in deficit on its foreign trade account. In 1978 it broke through into surplus for the first time, and it now seems to have established itself among the technical leaders in the world industry. As seventh or eighth manufacturer in the international league table (depending on currency variations), it is on a par with the UK industry.

This change has come about gradually, as the producers have adapted themselves to the wider market opportunities which came out of the EEC and France's general push into export markets. Until this period French manufacturing industry had for historic reasons relied on overseas suppliers for a large proportion of its tooling. In the era of the Industrial Revolution this tradition had established itself because of the dominance of Britain in manufacturing. French producers looked to the UK to furnish most of their important demands.

The preference for British goods became rooted in the system because of the investment in skills to make the machinery work. But after World War I German tools were also imported in big numbers because they formed part of the war reparations agreement. In the wake of World War II France again looked overseas to tool up for its industrial expansion, this time to the U.S.

In the 1950s, however, the French machine tool industry came to the conclusion that it needed to make a concerted effort to expand in order to defend itself against the new technological development occurring abroad. It was clear at this time that the industry was moving into an era of technology based on electronic control methods; at the same time it was becoming much more internationalised, with certain companies and countries establishing dominant positions in specific applications.

The investment in technology was accompanied by a parallel drive into overseas markets. The creation of the EEC played a big part in this process, encouraging and pushing the French industry to make a counter-effort against the strength of the West German manufacturers. By 1977 the French industry managed to to cross an important psychological threshold, in that West Germany became its most important foreign market.

A third important motive element for the industry has been the strength of France's motor manufacturing sector in the last 10 to 15 years. The continuous expansion of car manufacturing, combined with the corresponding investment in tooling of all kinds, has kept orders flowing into the domestic machine tool producers—although, of course, many of the industry's machines have to be bought from specialised overseas manufacturers.

Client

At the same time the growth of the French vehicle producers' foreign operations has fed through into export orders for the machine tool companies. Last year, for example, Romania was the largest single foreign client for French products. This was almost entirely thanks to the order Citroen, the vehicle producer, has won from Romania to build a new plant making a French-designed car.

In common with much of the rest of French industry, one result of this export effort is that producers have become more dependent on the overseas economic climate. This year, for example, the French manufacturers expect that the industry will be only just about in balance on its account trade because of the general stagnation in world activity. Last year, in better economic circumstances, the French producers achieved a surplus of FFr 370m, despite a substantial rise in imports from FFr 1.3bn to FFr 1.6bn. Exports went up from FFr 1.7bn to FFr 2bn—a figure which compares with only FFr 642m ten years earlier.

Sales abroad have grown so quickly in fact that they have become during the last decade or so the main driving force of the industry, accounting for well over half of production and sales. In 1979 almost 65 per cent of output, on the basis of tonnage, was exported. In 1979, however, the industry also benefited for the first time in five years from favourable domestic conditions. Sales began to rise strongly in the spring under the influence of a widespread surge in investment, one of the results of improved business margins, and have only just begun to level off again.

The result was probably the best year financially since the 1974 oil crisis. Although the French industry went through a buoyant spell in 1975, when the reflation programme of the then Prime Minister, M. Jacques Chirac, was in full swing, this was extremely shortlived and was followed by several fallow years after the bottom fell out of the bom and M. Raymond Barre, the present Prime Minister, introduced his more conservative style of economic management.

The tougher market conditions of the last five years have ineveitably led to a shake-out in the industry, but not all that many companies have disappeared. The main effect has been felt by the workforce, which has shrunk from a high point of about 27,000 in 1972 to 20,000 last year. By far the greatest proportion of this shrinkage has come among the manual workers, down from about 17,000 to 12,000, as the industry has tried to improve its productivity while continuing to invest in skilled workers.

FRENCH MACHINE TOOL INDUSTRY

	1979	1978	% change 1979/1978
Workforce	20,100	20,700	− 2.8
Production (tonnes)	74,434	72,399	+ 2.8
Production (value)	FFr3.7bn	FFr3.3bn	+12.1
Exports (tonnes)	47,805	49,320	− 3.0
Exports (value)	FFr2.0bn	FFr1.7bn	+17.6
Imports (tonnes)	39,714	35,638	+11.4
Imports (value)	FFr1.6bn	FFr1.3bn	+23.0
Trade balance	+FFr370m	+FFr420m	−12.0

Alongside this progress in productivity, however, there have been a number of amalgamations designed to reinforce commercial networks and combine financial resources. Perhaps the main reorganisation of this kind was pushed through by the Line group about two years ago, creating an organisation of about 2,250 workers. Line did not close a single factory in this process, which brings together seven companies under a single holding structure, but activities in the ten plants under its control including one in North America, have been stremlined. Turnover now amounts to about FFr 550m.

Specific

The crisis has also had the effect of forcing companies to concentrate their efforts on more specific areas. Several of the big French companies, including Line, Ernault Somua of the Empain Schneider group, and the CIT-Alcatel works at Graffenstaden, still have a wide range of products. But some of the best-known names are closely linked with specific industries. Berthiez, for example, is under the control of SNECMA, the nationalised aero?engine concern, and does a great deal of work for the aerospace industry, including the rocket and space activity of Aerospatiale. Manurhin — in which Matra, the advanced technology company, has recently taken a 30 per cent stake—also does a lot of specialised work for the armaments industry.

The other big specialised sector is in the vehicle industry, which is reckoned to account for about 20 per cent of all French machine tool sales. Two of the French vehicle companies, Renault and Citroen, have well-developed machine tool divisions on their own account, making equipment both for internal use and external sale.

Whereas Renault has for some time treated these activities as a separate entity, Citroen has only recently tried to look outside its own factories for clients, setting up its machine tool division as a separate profit centre. The company has a range of specialised tools aimed in the first place to machine to more precise standards because of the demands of its idiosyncratic suspension and steering designs. During the financial crisis which hit Citroen six years ago and forced it into a merger with Peugeot, the new management decided that this was one activity which could increase income by setting out on an independent search for customers.

While many of its orders still come as a spin-off from its car activities—such as the new factory in Romania—there are others which have come from this division alone. These include deals with Volkswagen, Renault, and Saint-Gobain-Pont-a-Mousson, the big French conglomerate.

Citroen's experience is a typical, if extreme, example of the way the French industry has turned recently to overseas markets. Its activities in Eastern Europe—not only in Romania but also in East Germany, where it is building a factory to make universal joints for front-wheel drive cars—also underline the heavy dependence of this foreign trade on the Communist bloc. Last year Communist countries were the largest overseas clients of the French machine tool producers, accounting for FFr 611m of orders against FFr 534m in the EEC. Some critics believe this overdependence on Eastern Europe is the industry's greatest weakness, and to some extent it has acknowledged this point by beginning to diversify its overseas markets and, in particular, to make a big effort in the U.S.

Terry Dodsworth

Vigorous sector in Italy

THE RECENT vigour displayed by the Italian machine tools industry, second in Western Europe only to that of West Germany, is in many respects an uncanny reflection of what has happened in the Italian economy at large. Last year was almost a boom year for Italy. Gross Domestic Product grew by 5 per cent, the most real progress of any Community country, and industrial production rose by even more.

For the machine tools sector the performance was even more impressive. First estimates from the national manufacturers association, UCIMU, suggest that production last year climbed by 25 per cent in value terms, and 10 per cent in real terms to L1.125bn ($1.27bn). The main factor underpinning this growth was—for the first time for several year—a sharp increase in the home market's demand for machine tools of around 20 per cent. Exports, which have since the onset of the economic crisis of 1974 provided most of the sector's dyhamism, did not grow, and in fact showed a marginal decline of 0.7 per cent in real terms.

The industry itself, however, is not dispirited by this reversal of a five year trend. Analysts point out that the rapid rise in home demand meant that it was impossible to meet demand from abroad as successfully as in the past.

Advantage

More important perhaps, it was domestic producers of machine tools which attained most advantage from the extremely buoyant home market in 1979. While demand grew by one fifth, importers managed to increase their sales of tools in Italy by just 11 per cent. Preliminary figures from UCIMU indicate that the share of imports of home consumption dropped narrowly to 27.8 per cent from 29 per cent in 1978.

That year imports accounted for L165bn ($187m) of total spending by Italian-based companies of L559bn ($635m) on machine tools—in terms of weight 33,820 tonnes out of overall demand of 94,900 tonnes. Exports in 1978 accounted for more than half—L506bn ($575m)—of total output of L900bn ($1.02bn). The resulting trade surplus was L341bn, and UCIMU now reckons, that despite the tiny droy in real exports last year ,the sector's net trade surplus rose slightly in money terms, to L360bn. It is a sum that roughly covers one month of Italy's current annual trade deficit. Thus can be measured the importance of the machine tool industry, which employs around 37,500 people.

It is centred, predictably, in the industrialised north of the country, and its structure reflects much of what is most dynamic in the Italian economy. The companies tend to be small and highly specialised, and with an export organisation that belies their size. It is sometimes argued that further rationalisation into bigger productive units is likely but experience in other fields of industry in Italy gives grounds for caution. Bigness, in Italy especially, is all too often a recipe for inficiency and failure.

In any case Italy is now the world's third largest exporter of machine tools, outstripped only by West Germany and Japan. In the past decade it has overtaken six other countries, including the U.S., Switzerland, Britain and France. The reasons are various, but there is little doubt that the motivation for the successful export drive stemmed from the slump in home demand in the early 1970s, which has been properly reversed only in 1979.

Exporting was literally the only means of survival, and over the last decade the structure of the industry has perceptibly changed. Concentration on foreign business has become the norm, rather than the exception. Companies have an international outlook, while UCIMU itself has provided a useful support. Carefully promoted fairs and demonstrations, for example, have been mounted in potential export markets like South Africa and Venezuela.

At the same time the industry has been blessed by the warm commercial relations existing between the Comecon countries and Italy—in turn built on the proven success of big Italian groups in Eastern Europe, and the useful entree into Communist and radical Third World countries which has derived from the existence of a powerful Communist Party at home. This is all part of a generally low profile foreign policy, which has enabled the country to maintain good relations in most parts of the world.

The result has been that in 1979, for example, the Soviet Union was the Italian machine tool manufacturers' biggest single market, worth L75bn ($85m). After West Germany and France, the second and third markets respectively, came Romania with L43bn ($49m), then Britain and the U.S., with Czechoslovakia in in seventh place. As an UCIMU official pointed out recently, the absolute need of these countries to expand their narrow industrial bases means that they have the greatest need for machine tools. In the West, on the other hand, conditions are much tougher. The market is primarily one of replacement and modernisation of existing plant, with a much slower rate of overall expansion of the manufacturing base.

Italian companies have also changed their image significantly. The early phase of the industry's export development was helped by the considerable price advantage given by the devaluation of the lira between 1973 and 1976. But latterly it has been technical expertise and quality that has given the industry its edge. In price terms there is not very much to choose now between an Italian and a West German product.

This is coupled with the proven ability of Italian companies, in this as in other fields, to meet the specific requirements of foreign clients. A fragmented structure works in favour of a great specialisation among the myriad producers. They can manufacture a particular machine in very small quantities (sometimes just a one-off) to match the exact need of the foreign or home customer.

Closer to home, however, the industry's prospects are less rosy than in 1979. Economic forecasters disagree on the extent, but there is no doubt that industrial expansion will be much reduced in 1980—perhaps to zero growth in the later stages of the year. Much the same goes for the major Western export markets which are so important for the industry.

Meanwhile, soaring domestic inflation, running in excess of 20 per cent a year, is inexorably pushing up costs and threatening price competitivity. A lira that is now part of the European Monetary System no longer offers the possibility of a swift and painless devaluation. It remains to be seen how machine tools manufacturers, like the rest of the country's engineering industry, will react to the changed circumstances.

Rupert Cornwell

Switzerland among the world's leaders

WITH A production value of well over $900m annually, the Swiss machine tool industry is one of the most important in the world. Its position on export markets is particularly strong, since over 80 per cent of total output is sold abroad. As in other sectors of Swiss industry, manufacturers concentrate on special products with high unit values; price per tonne of exported machine tools, at some SwFr 40,000 ($22,220), is more than double the average import price.

For some years growth had been limited by the high Swiss franc exchange rate and to some extent by sluggish demand. In the period between 1974 and 1978 exports had been showing little expansion — indeed, lost some ground in real terms—with no opportunity to make up the slack on the home market. Work on hand declined in the years 1974-76 alone by about one-third, averaging only about six months' production. Subsequently, order books showed only, a slight improvement.

As far as total exports are concerned, the industry registered a noticeable upturn in 1979. Overall value of sales to foreign markets went up by 12.6 per cent last year to SwFr 1.31bn ($727m). Most companies have been reporting an upward trend in new orders and inquiries, and employment seems to be guaranteed for at least the first half of the current year. Although orders have fallen off from the Swiss watch industry, there have also been signs of an overall improvement in domestic sales. In a recent communiqué the Swiss Association of Machinery Manufacturers felt able to express "cautious optimism" for the machine-tool business.

Despite this improvement the industry is stil far from booming. At the end of 1979 orders on hand were equal to only about seven months' output, or rather less than the adjusted seven-month level for the final quarter of the previous year. This is a far cry from the just over nine months booked as a 1974 average. At the same time, competition has remained very tough at home and abroad, making it impossible to pass on higher wage, material and energy costs to the customer in the form of coresspondingly higher prices.

This is only partially offset by the weakening of the Swiss franc in recent months and the consequent improvement in actual export earnings and Switzerland's competitive position.

Profitability has been under pressure for longer than just the past year. The combination of international competition, flagging demand and an unfavourable exchange rate has, say manufacturers, meant that Swiss machine tools have hardly risen in price over a period of years; margins had been narrowing and narrowed further in 1979.

This continued pressure on Swiss franc prices has not unnaturally been accompanied by a marked swelling of import business. Domestic customers, many of whom have themselves been directly hit by recession and the effects of the currency crisis, were in no position to "buy Swiss." Sales of foreign machine tools on the Swiss market rose by 40 per cent in 1977, 20 per cent in 1978 and again by 15.5 per cent last year.

Neighbouring

The marked cheapening of imported units in terms of Swiss francs has now come to an end, though, and local suppliers are now much better placed to hold their own. Over a half alone of all imports of machine tools come from the neighbouring Federal Republic, other major sources last year having been Italy, France, the UK, Japan and the U.S.

The Swiss market is regarded as a particularly attractive one by the international machine tool industry. Switzerland serves as a popular test market, both because of its high level of industrialisation and the high standards set by buyers. Some thirty countries or more are currently supplying machine tools to Switzerland, which last year imported these to the tune of over SwFr 256m ($142.2m).

While much of the import business is made up by serial and standard machines, Switzerland's 180 machine tool manufacturers are concentrating more and more on special units with a very high know-how content. This has kept sales prices more elastic than would otherwise have been the case, the generally small and medium-sized producer companies having shown considerable flexibility in keeping up to market needs.

Among the leading specialities of this kind are such machines as the so-called "Swiss-type" turret automatic, co-ordinate drilling and milling machines, gear cutting and finishing units, electrical-discharge processing machines, fine cutting equipment, and high precision copying lathes and copy milling machines. Switzerland was not in the forefront of numerical control developments but has since made up a lot of ground as demand for these uits has grown rapidly world-wide.

This stressing of high quality products calls for correspondingly high expenditure on product development. Current profits do not seems always to be enough to meet R and D requirements. Last year Mr. Georges Mégel, chairman of the association's machine tools group, said that a "normal" rate of research and development spending would be of about 3 to 4 per cent of turnover; this had not, he added, been attained in Switzerland. The machine tools industry suffers, as do other sectors of Swiss engineering, from a lack of sufficient skilled labour. This is detrimental to industry attempts to shorten delivery dates in today's highly competitive international market.

Demand is nevertheless picking up. A much needed boost was provided by the European Machine Tools Exhibition held in Milan last year, with subsequent orders described as "good to very good," according to a statement made early in 1980. Over 30 Swiss manufacturers will be taking part in this month's MACH 80 in Birmingham and September's IMIS-80 in Chicago.

As far as foreign demand is concerned, there has been a definite drop in purchases by the OPEC countries after heavy spending in previous years; these sales, however, account for only a fraction of Swiss exports of machine tools. More important was last year's 6 per cent decline, to SwFr 242.3m, in exports to Comecon countries. As recently as 1977 these had accounted for nearly 30 per cent of all Swiss machine tool exports, as compared with only 18.4 per cent last year.

These losses and individual declines in a number of minor markets have been more than made up for by growth of Western-world demand, though. Of particular importance to the industry is the Federal German market, which alone acounts for 22 per cent of all export sales. Aided by a marked weakening of the Swiss franc in terms of the Deutsche Mark, German-bound deliveries jumped in value terms by a full third in 1979 to al evel of SwFr 289.7m ($160.9m). Similarly, exports to the UK rose by 28.3 per cent over the year to SwFr 84.2m ($46.7m) and those to Italy by no less that 43.1 per cent to SwFr 67.1m ($37.2m). Most Western industrialised markets showe da good rise in 1979 in purchases of Swiss machine tools, among them the U.S., France and Japan.

Second only to West Germany as a customer for Swiss machine tools is still the Soviet Union, with a 1979 purchase equal to SwFr 121.3m ($67.38m). In 1976 and 1977, though, Russia had been even bigger than the Federal Republic as a buyer, with sales of almost SwFr 200m in each of those years. Swiss manufacturers will continue to work at developing sales in Russia, but things do not look particularly promising at present. Elsewhere in the Communist world business is looking up. In China, now the seventh biggest export market (after Italy) sales leapt 77.8 per cent last year to a sum of SwFr 39.3m ($21.8m).

John Wicks

WORLD STOCK MARKETS

Early Dow rally of 20 points

A SHARP and widespread recovery took place yesterday morning on Wall Street in heavy trading.

The Dow Jones Industrial Average, which declined to a two-year low on Monday, rebounded 20.05 to 779.18 at 1 pm yesterday. The NYSE All Common index recouped $1.26 at $57.99, while rises outpaced falls by nearly a six-to-one ratio. Trading volume welled to 32.42m shares from the previous day's 1 pm figure of 16.69m.

Analysts said the market was ripe for a technical rally following six consecutive sessions of falling prices that knocked 32 points off the Dow Jones Industrial Average.

Also, news that consumer price increases in March did not accelerate from the 1.4 per cent rate of increase for both January and February bolstered sentiment. Federal Reserve Board chairman Volcker said on Monday night that he expects a few more months of big increases in consumer prices, but that the inflation rate should decline appreciably late in the year.

Recently-depressed General Motors gained 1⅛ to $40¾ and Ford Motor 1⅜ to $23⅛. Raytheon rose 3⅛ to $67⅝, Boeing 1¾ to $35⅜, Asarco 1¼ to $32⅝, Union Pacific 3⅝ to $74⅞, IBM 1¾ to $52⅞, Honeywell 4⅞ to $71⅛, International Paper 2¼ to $33⅞, Walt Disney 1⅝ to $44½ and McDonald's $1 to $41½.

Texaco, which reported sharply higher first-quarter net earnings, put on ¾ to $34⅜ in active trading.

Among other Oil and Oil Service issues, Superior Oil jumped $5 to $137, California Standard 2½ to $68⅛, Hughes Tool 5⅜ to $58⅜ and Schlumberger 2¼ to $105.

THE AMERICAN SE Market Value Index climbed 7.36 to 241.06 at 1 pm. Volume 3.10m shares (1.66m).

Canada

Most sectors also picked up well on Canadian markets early yesterday in a fairly active trade. The Toronto Composite Index regained 24.3 to 1,808.8 at noon. The Oil and Gas index rose 115.6 to 3,973.2, Golds 20.6 to 2,694.9 and Metals and Minerals 48.7 to 1,735.9, but Banks eased 0.43 to 298.85.

Tokyo

Shares tended to decline in fairly active dealings with Oils leading the way following the suspension of Iranian oil shipments to Japan. The Nikkei-Dow Jones Average receded 11.66 to 6799.01. Volume 320m shares (350m).

The downtrend was curbed towards the close after the Tokyo foreign exchange market reacted calmly to the suspension of Iranian oli shipments.

However, Nippon Oil lost Y40 to Y2380, Teikoku Oil Y30 to Y1,360 and Maruzen Oil Y26 to Y438. In contrast, Coals were sharply higher in anticipation of increased demand for the fuel. Mitsui Mining rose Y52 to Y895, Matshushita Kosan Y54 to Y830 and Mitsui Coal Y17 to Y378.

Recently-selected large-capital issues lost ground on profit-taking and other liquidations.

Nippon Mining gained Y6 to Y367, Rasa Industries Y27 to Y502 and Mitsubishi Y8 to Y688 after the Stock Exchange eased margin trading controls for the three stocks with effect from yesterday.

A few Light Electricals continued to find favour, Sony adding Y50 at Y1,980 and Pioneer Electronic Y30 at Y1,800.

Germany

Lacking the recent foreign buying interest and unsettled by a downturn in the Domestic Bond market, share prices mainly reverted to an easier course yesterday in light trading, in contrast to the recent rallying trend. The Commerzbank index shed 8.2 to 694.2.

Stores were the only sector to produce some noticeable gains among the majors. Karstadt rose DM 5,50 and Kaufhof DM 3, but Horten lost DM 2.50 and Neckermann DM 2.

In Electricals, Brown Boveri receded DM 6.90 in a narrow market. Deutsche Babcock led Engineerings down with a fall of DM 5.50, while among Metals, Degussa and Metalgesellschaft lost DM 3 apiece.

Public domestic issues on the Bond market gave way by about 80 pfennigs in a technical reaction to recent rises, although isolated issues posted gains of upp to 40 pfennigs. The Bundesbank, which had been able to release paper onto the market for the past few days, purchased stock yesterday nominally valued at DM 18.2m. Mark-denominated Foreign Loans were steady to firmer.

Australia

Markets, apart from Oils, turned in another slack performance, with only a handful of special situations providing some light relief.

The oil flow at the Cuttapirrie No. 1 well in South Australia's Cooper Basin breathed new life into the Oil boards after a slow start.

News of a 170 barrels per day test flow pushed Vamgas 30 cents higher to A$4.10 and Santos 8 cents firmer to A$7.98, while heavily-traded Woodside put on 5 cents more to A$2.20. Oil leader BHP gained a net 5 cents at A$11.95, after trading as low as A$11.75.

On the Mining Posts, Tins and Beach Sands held up all day, but Golds, Silvers and Base Metals were depressed by the gloomy commodities markets in London overnight.

TNT, the Sydney-based transport group, reported a net profit of A$28m for the nine-months to March 31 and announced a share issue on advantageous terms and rose 8 cents to A$2.40.

Paris

Bourse prices were marked down over a wide front in a thin business.

Market observers said the overnight weakness on Wall Street had sapped investor enthusiasm. The announcement of a quarter-point cut in base rate to 13 per cent by a second bank, Cie Financiere, of the Edmond de Rothschild group, following an identical cut by Credit Industriel Alsace Lorraine, failed to raise spirits in the stock market. Operators were waiting to see whether any of the major banks will follow suit, dealers said.

Electricals were among the worst hit, with Matra losing FFr 250 to FFr 8,850.

All other sectors lost ground except for Foods, which were mixed.

Elf-Aquitaine, which forecast production of 1.5m tonnes a year at its Congo field at Likoula shed FFr 18 to FFr 1,230.

Hong Kong

After Monday's holiday closure, the market opened strongly in the wake of a firm performance in London overnight. There followed good support throughout the session and most shares closed at their best level of the day. The Hang Seng index advanced 17.26 to 840.12.

Among Properties, Cheung Kong rose HK$ 1.10 to HK$ 25.70 on active buying ahead of going ex the 37 cents final dividend with one-for-one bonus issue at the end of the week.

Johannesburg

Gold shares eased afresh across the board in active trading in line with a lower Bullion price.

Heavyweight counters showed losses ranging to R3, as in the case of Durban Deep, R25.00. Randfontein lost R2 to R69 despite good prospects forecast in the annual report.

Industrials retreated over a broad front, with falls outnumbering gains seven-to-one.

Closing prices for North America were not available for this edition.

NEW YORK

Indices

NEW YORK ACTIVE STOCKS

CANADA

BELGIUM (continued)

HOLLAND

AUSTRALIA

JAPAN (continued)

DENMARK

FRANCE

GERMANY

AUSTRIA

BELGIUM/LUXEMBOURG

ITALY

NORWAY

SWEDEN

SWITZERLAND

HONG KONG

SINGAPORE

SOUTH AFRICA

BRAZIL

Fishermen threaten sanctions

By Richard Mooney

BRITISH FISHERMAN have threatened to adopt a policy of non-co-operation with the Government unless their demands for protection against cut-priced imports and higher support prices are met.

Members of the National Federation of Fishermen's Organisations, which represents *mainly skipper-owners, is con*sidering an embargo on the provision of information and statistics to the Ministry of Agriculture and Fisheries and refusal to fill out fishing logs. There has also been talk of blockading fishing ports.

In a letter to Mr. Peter Walker, the Agriculture and Fisheries Minister, the federation said it wanted EEC support prices to be doubled, a tax of at least 15 per cent to be imposed on fish imports from outside the Community and restriction of EEC fish imports to 1978 levels.

"Low priced imports of fresh and frozen fish are disrupting all our efforts to secure the orderly marketing of our fish," the letter said.

Meanwhile the British Fishing Federation, which represents the larger trawling companies, said its members had been angered by the sight of Con*tinental* fishermen shrugging their shoulders at accusations of illegal fishing on a television *programme:* "This attitude is plainly echoed by their governments," a spokesman said.

The programme, Granada's World in Action, showed large stacks of illegally-caught outlawed *small-mesh nets at the* herring, undersized cod and French port of Boulogne.

Forest report 'self-defeating'

By Our Commodities Editor

FORECASTS of a world timber shortage could be dangerously self-defeating, Mr. Robin Howard, *president of* the Timber Trade Federation, warned in London yesterday.

Referring to the recent report on "A forest strategy for the UK," by the Centre for Agricultural Strategy at Reading University, Mr. Howard said there were many excellent reasons for increasing afforestation in Britain, but to base a case on some hypothetical shortage of timber threatened in 20 years could be self-defeating.

There was no more effective way of discouraging customers than to tell them there wouldn't be any timber for them to use.

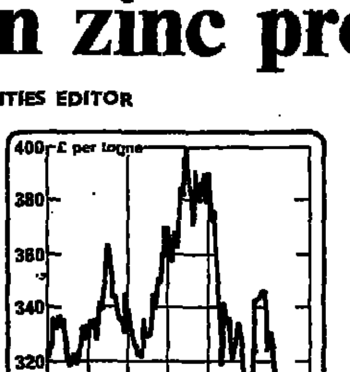
European zinc producer price cut

BY JOHN EDWARDS, COMMODITIES EDITOR

A CUT in the European zinc producer price, from $825 to $76/ a tonne, was announced yesterday by Metallgesellschaft, a leading German smelter. It is expected to be followed by other zinm producers, who are already believed to be offering discounts on the official producer price, especially in the highly competitive West German market.

The cut comes only a few months after producers otok adavntage of the general metals boom earlier this year to put up their prices. Some put up their price in January, and the rest followed roughly a month later. But they have come under increasing competitive pressure following a *decline in U.S. zinc prices and* a sharp fall on the London Metal Exchange zinc market, *where values are at the lowest* point since August last year.

Cash zinc lost only £3.5 *down at £296 a tonne,* but this compares with a peak of £400 reached in February *this year.*



Zinc prices, and demand, were artificially boosted *during the general rise in* metals earlier this year when consumers were persuaded to *build up stocks as speculators* helped force values higher. Subsequently with the decline *in speculative activity, and the* rise in interest rates, consumers have been cutting back *stock levels again.*

Producers hope that the *buying pattern will return to* normal soon and were hoping to avoid a producer price cut in *the* meantime. It is claimed supply and demand are in better balance without the huge surplus stocks that so depressed prices previously.

Since the bulk of zinc outside North America is sold at the European producer price, the move by Metallgesellschaft represents a setback for mining companies and smelters.

However, it is not unexpected *since demand for zinc* has been generally sluggish with its two main outlets—galvanised steel and diecasting—both under pressure. Prospects for zinc diecasting are looking particularly gloomy with the cutbacks in car production, allied with a general move away from zinc in favour of lighter materials as part of the overall drive *towards* reducing petrol consumption.

Ironically, there is a scarcity *of zinc concentrates, required* by smelters, at present because of worldwide mine cutbacks. Smelters margins are being sequeezed by having to pay firm prices for their raw materials (concentrates) while being forced to accept depressed prices for their finished product (zinc metal). Hence the move to lower the base price.

Other metals were generally depresed yesterday but rallied in afternoon trading following the recovery in gold. Three months lead, for example, traded below £400 for the first time since the end of 1978 before rallying to close only £2 down at £409.5 a tonne. Three months copper wirebars fell below £900 for the first time since August last year, but also recovered to close £8.75 down on the previous day at £912.5 a tonne.

● The New York Commodity Exchange (Comex) announced yesterday it is reducing margin requirements for gold, silver and copper futures.

Quick end to embargo unlikely

U.S. SENATE House Agriculture *Committee Chairman* Thomas Foley said he saw no quick resumption of normal grain trade with the USSR.

A meeting of newspaper farm editors was told that it was inconceivable that President Carter could call off the grain embargo. "It is hard for me to see an end to the embargo unless the Soviets leave Afghanistan," *he said,* adding it would be difficult for Carter or any other administration to reverse the embargo.

Mr. Foley said he had not supported the embargo when President Carter sought his opinion before the decision was announced.

Mr. Foley cautioned farmers against blaming the embargo for all their financial problems. "*We need to focus on the* general problems of farming rather than solely on the embargo. Agriculture was in some difficulty before the embargo," he said.

There was no way of knowing how much of the drop in farm income is directly related to the embargo since the U.S. Agriculture Department (USDA) had already forecast a decrease of $20m this year.

Mr. Foley said the Government should have acted faster to offset the embargo effects and should have announced a set-aside programme for grains to cut some of the surplus.

"*The U.S. Government* is going to wind up with a lot of grain, and that was *not* the *object," he said. But he saw no* need for a soybean set-aside programme this year.

There was little congressional or farm organisation support for a national grain board, he told the meeting. He said he did not support a heavy interventionist programme.

Mr. Foley advocated establishment of an international food reserve to insulate more of the surplus government stocks from the market place.

The net effect of the U.S. embargo will leave the Soviet *Union 7m tonnes short of the* 37.5m tonnes it had expected to import between July 1979 and *this June*, an USDA report has said.

The supply shortfall is showing up in Soviet livestock statistics. Inventory gains during the first quarter of this year for cattle and poultry were the smallest in years and hog numbers declined for the first time in several years.

Due to declining slaughter weights, Soviet *meat production* will probably decline in 1980 rather than increase as the Soviets had planned.

EEC feed grain levy criticised

WEAKNESS *in the present* EEC feed grain levy system could be better tackled by changing the method of world price assessment than by intro*ducing a single feed grain levy,* the HGCA reported.

The authority was commenting on EEC Commission proposals to replace the current system of individual feed grain levies with a single levy, calculated on the difference between the maize threshold price and either the lowest reported feed grain cif price or the lowest reported maize offer price.

The authority said a single levy would not necessarily encourage traders to buy the cheapest feed grain available because a substantial proportion of EEC feed grain imports go to human and industrial processors, who, unlike feed manufacturers, cannot readily substitute between grains.

It added both the proposed systems at current prices would imply larger import levies for basic grains, which would be reflected in higher import levies on processed products and also in some higher export refunds on cerela processed products.

Rumours boost sugar market

A REPORT that the USSR was negotiating to buy Philippines sugar boosted values on the world market yesterday. The August futures position, which *fell £11 yesterday, ended the* day £5.25 up at £265.625 a tonne.

Dealers said the rise was also encouraged by rumours that Poland had oversold its crop by around 100,000 tonnes and that Iran may soon be in the market for about 150,000 tonnes.

On the cocoa market, meanwhile, the nine-day price decline was halted with the July position rising £4 to £1,270.5 a tonne. But the price was still about £140 below the level ruling a fortnight ago.

The upturn came inspite of reports from dealers that Ghana had sold beans and cocoa butter to the market. Ghana's emergence as a seller came after the market had fallen to new life-of-contract lows, they said.

But a late technical recovery, based on the tone in New York, lifted prices near the close.

EEC FARMING

Britain warms to national aid plan

BY JOHN CHERRINGTON, AGRICULTURE CORRESPONDENT

SIGNS THAT the Government is seriously considering the idea of direct national aids to assist some agricultural sectors became apparent at the weekend when Mr. Alick Buchanan-Smith, Minister of State at the Ministry of Agriculture, claimed this was the only way to control the cost of the EEC's Common Agricultural Policy.

Mr. Peter Walker, the Agriculture Minister, has hinted at the possibility of using national financing within the CAP, but never in such definite terms as used by Mr. Buchanan-Smith.

Speaking in Aberdeen, Mr. Buchanan-Smith discarded alternatives suggestions for controlling EEC agricultural expenditure. A price freeze, he indicated, would do no more than stimulate farmers to produce more to reduce their unit costs: as in fact is happening with milk at the moment.

A co-responsibility levy accompanied by a rise in prices, would raise costs to the consumer and probably cause more surplus production. Production quota systems, he added, although operating in sugar, had done nothing to reduce output and were in any case difficult to agree among member countries. Subsidies for getting out of production had done nothing to control overall output nor had those for consumption.

There was nothing non-com*munautaire about an element* of national financing, he insisted.

He gave as an example grant aid for capital investment and help for less favoured areas. *There is also the British beef* premium scheme to which the EEC contributes 25 per cent of the expenditure.

National aid to production would make some governments vulnerable to pressure from farming interests, and he was not in favour in extending the principle. But national farming aids would make it possible to instil some discipline into the costs of the Common Agricultural Policy.

There were several ways of working at national financing. The simplest would involve member states paying a proportion of the total costs arising under the guarantee section of the budget for all price support in the Community. This would *make Ministers of Agriculture* responsible to their own governments for a proportion of the *costs of their annual price fix*ing, as against the present system of loading the whole cost *on the community budget.*

There is no doubt that Mr. Buchanan-Smith's proposal is the first move in an attempt to negotiate a reform of the CAP, probably in conjunction with a reduction in the British contribution. But the chances of acceptance are, for the moment, negligible, as too many of our European partners gain considerably from the CAP. Even those who get no direct budgetary advantage, such as Germany, would have to pay out more to their producers under national aids.

World commodity fund hopes brighter as delegates resolve differences

BY BRIJ KHINDARIA IN GENEVA

THE $750m common fund to finance commodity price *stabilisation schemes* has moved considerably closer to establishment following the latest round *of negotiations here.*

In spite of radical differences between Third World and indus*trialised countries about how* the fund should be financed and operated, the outlook for final agreement at a conference in Geneva from June 5-18 has brightened significantly.

Expert level talks here during the last two weeks failed to produce any definite conclusions, but they reduced the number of points under dispute by nearly half.

Some important conceptual differences remain which might still torpedo the June conference. However Third World delegates have been encouraged by a changed negotiating style among industrialised countries.

"The industrialised countries seem more willing to make a big effort to reach agreement—the political will is there—we only ned to find the right formulations," one Third World delegate commented.

Speaking for the industrialise countries, French ambassador, Stephane Hessel, told the closing session of negotiations for the fund that "a large spirit of compromise" was needed to ensure success at the June conference.

The main differences between Third World and industrialised countries concern the fund's basic characteristics: the Third World argues that the fund should be a lending institution financied directly by governments and participating International Commodity Agreements (ICAs). It should lend to needy ICAs on better than commercial terms and should itself borrow from international money markets to augment its resources when needed. Governments should underwrite the fund's liabilities so that it might get a high credit rating.

Industrialised countries say the fund should be no more than an itermediary between needy ICAs and world money markets or lending institutions, including private banks and international monetary bodies. It should not act as a bank.

Another important dispute concerns the voting methods to be used by the fund's managing committee to take decisions. Differences also remain on technical matters concerning the fund's composition and financial operations.

BRITISH COMMODITY MARKETS

BASE METALS

COPPER—Easier again on the London Metal Exchange but well above the day's lowest level. Forward metal opened at £907, owing to renewed selling *in overnight U.S. markets, and* moved up to £914 on the pre-market following short covering and modest fresh buying. However, in the morning rings and on the kerb the market came *under* heavy selling perssure as long liquidation triggered stop-loss selling *below the £900 level. Three months* consequently dipped to £895 on the kerb. In the afternoon a rise in golds coupled with a higher than expected *opening on Comex encouraged a strong rally* with forward metal finally £15 at the close. Turnover 17,900 tonnes.

COPPER	a.m. Official	+ or —	p.m. Unofficial	+ or —
	£	£	£	£
Wirebars				
Cash	892-4	—27.5	891-3	—5.75
3 months	904-5	—31.7	912-3	—8.75
Settlem't	883	—28	—	......
Cathodes				
Cash	847.8	—32.5	860.5	—5.75
3 months	877.9	—32	189-90	—7
Settlem't	848	—33	—	......
U.S. Prod	—	......	*90.96.25	......

Amalgamated Metal Trading reported that in the morning cash wirebars traded at £884, three months £912, 13, 13.5, 11, 10, 09, 8, 6, 5, 4, 900, 02, 3, 4. Cathodes cash £847, 48, three months £877. Kerbs: Wirebars three months £902, 1, 900, 899, 96, 95, 96, 97, 96. Afternoon: Wirebars three months £905, 6, 7, 8, 7, 10, 11, 12.5, 13, 14, 13.5, 14, 13, 12. Cathodes cash £857, 60, 60.5, mid May £870, three months £890. Kerbs: Wirebars three months £916, 15, 13, 12, 10, 08, 13, 12, 13, 14, 15.

TIN—Lost ground. After opening at £7,600 forward metal came under heavy *selling from one Commission House on* the pre-market with the price falling *to £7,550. A rally developed in the* rings which took forward metal up to *£7,590. In the afternoon profit-taking* prompted renewed weakness and forward metal closed the late kerb at £7,520. Turnover 1,265 tonnes.

TIN	a.m. Official	+ or —	p.m. Unofficial	+ or —
High Grade	£	£	£	£
Cash	7595-605	—47.5	7570-90	—45
3 months	7585-95	—60	7535-45	—95
Settlem't	7605	—45	—	......
Standard				
Cash	7595-605	—47.5	7540-60	—80
3 months	7580-5	—57.5	7535-40	—90
Settlem't	7605	—45	—	......
Straits E.	‡$2320	+11		......
New York	—	......		......

Morning: Standard cash £7,620, 10, three months £7,560, 70, 75, 80. Afternoon: Standard cash £7,550, three months £7,580, 55, 50, 40, 20, 40, 30. High Grade cash £7,570. Kerbs: Standard three months £7,540, 30, 20.

LEAD—Down following the fall in copper and also reflecting the producer price cut by Asarco. Forward metal opened at £400 and moved ahead to £408.5 ...

ZINC

ALUMINIUM

NICKEL

SILVER

COCOA

COFFEE

GRAINS

bullion market yesterday at £6.0535. U.S. equivalents of the fixing levels were: spot $13.56, down 64c; three-month $14.047, down 71c; six-month $14.544, down 70.3c; and 12-month $15.492, down 89.6c. The metal opened at £5.8-6.15 ($13-13¾) and closed at £6-6.35 ($13½-14¼).

West 93.80, W. Midlands 91.50, N. West 92.70. Other milling wheat: W. Midlands 96.00, N. West 96.00.

RUBBER

The London physical market opened easier with good interest at lower levels, closing on a weaker note. Lewis ...

SOYABEAN MEAL

SUGAR

COTTON

WOOL FUTURES

JUTE

PRICE CHANGES

In tonnes unless otherwise stated.

	April 22 1980	+ or —	Month ago

AMERICAN MARKETS

NEW YORK, April 21.

PRECIOUS METALS were sharply lower on Commission House liquidation. Copper suffered a maor decline on adverse economic news. Sanctions against Iran including suspension of *sugar sales* led to a bid sell-off. Cocoa and coffee markets retreated on very light volume on limited speculative ...

1530.0, March 1570.0, May 1610.0, July 1650.0, Sept. 1690.0, Dec. 1750.0, Jan. 1770.0. Sales: 6,000. Handy and Harman bullion spot 1310.00 (1420.00).

Sugar—No. 11: May 22.60-22.75 (23.66), July 23.26 (24.26), Sept. 23.91, Oct. 24.20-24.30, Jan. 25.00, March 25.80-25.95, May 25.95-26.00, July 26.30-26.35, Feb. —. Sales: 9,600.

Tin—790.00-805.00 asked (795.00-...

EUROPEAN MARKETS

ROTTERDAM, April 22.

INDICES

FINANCIAL TIMES

DOW JONES

MOODY'S

REUTERS

Lack of follow-through support causes profit-taking

Gilts lead fall but equity index down 6.8 at 434.3

Account Dealing Dates
Options

*First Dealings	Declarations	Last Dealings	Account Day
Mar. 24	Apr. 10	Apr. 11	Apr. 21
Apr. 14	Apr. 24	Apr. 25	May 6
Apr. 28	May 8	May 9	May 19

* "New time" dealings may take place from 9 am two business days earlier.

Stock markets turned easier yesterday. A lull in recent investment demand prompted Gilt-edged dealers to lower quotations and encouraged short-term operators to realise some of the profits made over the previous few days. Opening easiness among equities was soon extended following the fall in Gilts and leading shares later came on offer from holders nervous about the U.S./Iran situation.

Once again, interest in Government securities focussed on the new ultra-long Treasury 13½ per cent 2004-08 which momentarily traded at a slight discount before steadying to close a net 1⅜ down at 20⅛, or a premium of only ⅛ on the £20-paid stock. Falls elsewhere among the longs extended to virtually the same amount, while the shorts sustained losses ranging to ⅛. Recoveries were attempted in both sectors but failed to hold until after the official close. The shorts then rallied by about ⅛, but the longs remained at the lower levels.

Suggestions that Monday's liquidation of City and International Trust's portfolio had taken too much out of the system were offered as an explanation for the equity setback. Institutional buyers were reported to have only small funds available for investment in equities and when jobbers showed a reluctance to take stock on to their books the market became nervous with the result that leading industrials closed as much as eightpence down in places.

Partly owing to the overall lack-lustre market performance, response to an unusually large number of company statements was limited but Travis and Arnold, United Carriers and Furness Withy all moved higher on news items. Measuring the general uncertainty, the FT 30-share index progressively extended a loss of 1.8 at 10.00 am to one of 6.8 at the close of 434.3. For the first time in nine trading sessions, falls outnumbered rises yesterday in FT-quoted industrials.

Business in Traded options improved slightly and 582 contracts were completed. This compares with the previous day's 448, and last week's daily average of 805. The more active issues included Racal, 166 trades, and Cons. Gold Fields, 132.

Insurances dull

Insurances succumbed to the dull market trend. The recently firm life issues lost ground with falls of around 4 seen in Hambro Life, 183p, Equity and Law, 224p, Legal and General, 163p, and Prudential, 183p. Among Composites, General Accident declined 6 to 238p and Eagle Star 5 to 182p. GRE relinquished 4 to 240p as did Phoenix, to 222p, while London United Investments cheapened 3 to 147p on further consideration of the second-half profits decline. In Lloyds brokers, Brentnall Beard lost a penny at 9p.

Sporadic offerings in an unwilling market left the major clearing banks around 5 lower at the close. Despite the settlement of the bank messengers' strike, NatWest lost that much to 325p. Lloyds also gave up 5 to 295p as did Midland, to 335p.

Leading Breweries closed with moderate losses on light selling. Allied, 73½p, and Scottish and Newcastle, 54p, both eased around 2 while Whitbread, 145p, Bass, 227p, and Arthur Guinness, 87p, all shed 3.

The Building sector displayed a notable firm feature in Travis and Arnold which advanced 22 to 272p on the better-than-expected annual results and proposed 100 per cent scrip issue. Timbers, the subject of considerable bid speculation recently, gave ground on profit-taking, Montague L. Meyer shedding 4 to 103p and Mallinson-Denny losing 3 to 72p, after 71p. Elsewhere, Ibstock Johnsen eased a penny to 69p on the chairman's cautious remarks about short-term prospects. Among Contracting and Constructions, Wilson (Connolly) added 5 to a 1980 peak of 205p on the excellent annual results and capital proposals, while Aberdeen picked up a couple of pence to 88p on late demand. Brown and Jackson eased 2 to 175p; National Coal Board Pension Funds Nominees has acquired a 12.7 per cent stake in the company. In the leaders, Blue Circle eased 4 to 316p, awaiting today's preliminary results.

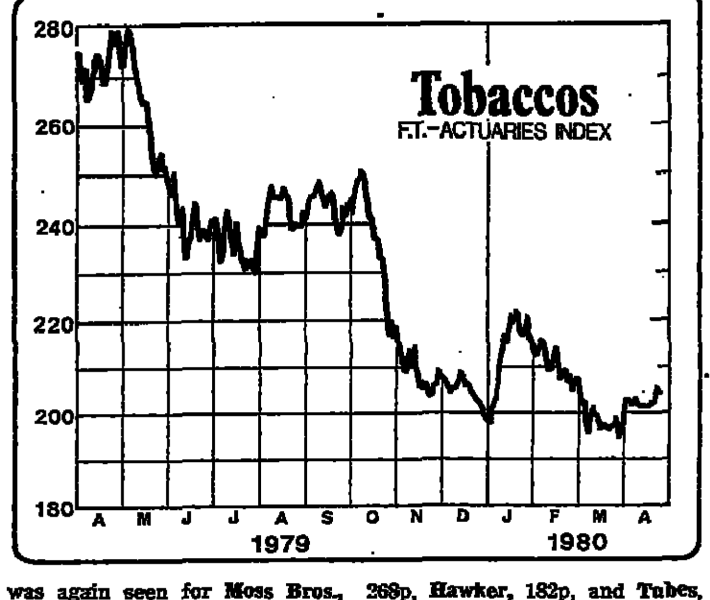
Leading Chemicals turned in a lack-lustre performance with ICI falling 8 to 362p and Fisons losing 5 to 277p. Laporte, annual results today, shed a penny to 110p, while Revertex, overshadowed by the poor profits and the passing of a final dividend, shed 3 for a two-day fall of 6 to 29p.

Grattan Warehouses provided an outstanding weak feature in Stores, falling 14 to 70p on nervous selling ahead of tomorrow's preliminary results. The uninspiring defence to Waring and Gillow's offer unsettled Maple, which, despite the satisfactory annual results, fell 1½ to 32p. John Menzies added a couple of pence to 230p in front of today's results, while support was again seen for Moss Bros., 4 up at 244p. D-I-Y issues tended to lower levels with MFI 4 cheaper at 72p. Further consideration of the full-year statement clipped 2 more from Executex, 36p, while Arthur Henriques, 50p, lost 4 of the previous day's gain of 16 which followed favourable weekend Press mention. The leaders remained quietly dull. Marks and Spencer came on offer at 87p, down 4, while GUS "A" gave up 6 at 386p, but House of Fraser, continuing to benefit from suggestions of a bid from Lonrho, ended 4 to the good at 136p.

In Shoes, Stylo succumbed to increased profit-taking in front of Friday's preliminary results and dipped 15 to 150p.

Electricals trended easier, Racal reacting 5 to 243p and GEC 3 to 373p among the leaders. Elsewhere, Farnell closed a few pence lower at 302p after the preliminary figures, while the proposed rights issue and profits and dividend forecast left Unitech 3 off at 302p, after 298p. Ferranti, 510p, and Muirhead, 168p, gave up 5 apiece, while adverse Press mention prompted a fall of a penny to 52p in Chloride. Among the occasional bright spots, renewed demand in an extremely thin market left Wholesale Fittings 15 to the good at 645p, after 690p, while Lec Refrigeration also encountered demand and put on 3 more to 65p.

Scattered offerings and the lack of any worthwhile support made for dullness in the Engineering leaders, falls of 4 being marked against GKN, 268p, Hawker, 182p, and Tubes, 244p. Vickers drifted off to close 3 cheaper at 114p awaiting tomorrow's preliminary figures. Elsewhere, occasional movements were mainly against holders. Wadkin fell to 70p following the sharp fall in annual profits before rallying to close only a penny off on the day at 76p. Following the previous day's flurry of buying, Delta closed a shade lower at 64½p; the annual results are due today. Against the trend, favourable Press mention left Expanded Metal 2 dearer at 56p.



Against the trend in quietly dull leading Foods, Associated Biscuit and A. B. Foods improved a couple of pence apiece to 78p and 94p respectively, the latter following favourable Press comment.

Lack of interest and small selling to 172p left Trusthouse Forte 8 down at 172p and Grand Metropolitan a couple of pence o ffat 125p. Among other Hotels and Caterers, M. F. North shed a penny to 23p on the lower annual profits, while lat offerings clipped 8 from De Vere to 210p.

Boots sold

Marked lower at the outset, the miscellaneous industrial leaders continued to retreat in sympathy with gilts and closed with falls ranging to 7. Boots encountered selling and finished that much lower at 186p; the preliminary results are due on May 22. Down 30 last week on poor interim figures, Glaxo remained friendless at 204p, down 6. Unilever cheapened 3 to 425p as did Turner and Newall, to 109p. Beecham softened 2 to 116p and Bowater eased a penny to 178p. Interest in secondary issues centred around those companies reporting trading statements. Charles Hill of Bristol became a prominent casualty, falling 8 to 50p, after 48p, following the final dividend omission and trading loss. Disappointing annual profits clipped 3 from Silentnight at 39p, while Bodycote International declined ing the results. Carlton Indus- a similar amount to 77p follow- tries came on offer at 274p, down 6, and Cawoods, at 178p, lost 4 of the recent North Sea oil inspired improvement. Howard Tenens gave up 4 to 58p and Granada A lost 5 to 166p. United Carriers, on the other hand, rose 6 to 136p in response to the increased profits and Brown Boveri Kent hardened 2 to 31p despite reduced annual earnings. Dull of late following a boardroom rift, Camrex picked up 2 to 33p. Elsewhere Applied Computers added 8 at 325p.

Boosey and Hawkes put on 10 for a two-day gain of 34 to 120p on vague bid rumours.

Pearson Longman featured Newspapers with a gain of 7 at 192p following the increased earnings and dividend. Elsewhere in publishing issues, Oxley fell 6 to 35p on the sharp setback in annual profits.

Selling among leading Properties did not amount to much and losses rarely exceeded a few pence. Elsewhere, Chesterfield added 3 to 308p, after 310p, on the preliminary results.

Oils above worst

Oil shares remained relatively lively and, after showing earlier dullnes, rallied to close with only modest losses on balance. Sentiment in the leaders was again unsettled by the Iranian situation, but BP ended only 2 lower at 334p, after 330p, while Shell finished 4 cheaper at 344p, after 342p. Elsewhere, Ultramar reacted 8 to 596p and Siebens 5 to 655p, while Lasmo settled without alteration at 520p, after 515p. Burmah gave up 5 to 211p and Cluff 10 to 350p.

Tozer, Kemsley and Milbourn produced the expected good full-year profits and rose 4 to 79p. Other Overseas Traders displayed modest losses. Falls of 3 were common to Lonrho, 87p, and S. and W. Berisford, 143p, while Steel Brothers eased a couple of pence to 123p in response to lower annual earnings.

Trusts drifted a few pence lower, but Financials were featured by a rise of 8 to 202p in S. Pearson on the better-than-expected results and increased dividend.

Golds lose ground

Mining markets came under pressure because of renewed weakness in base-metal prices and the uncertain trend in the bullion price. The latter was finally $8 firmer, however, at $505.50 after having been $495.50 at the morning fixing.

South African Golds fell sharply at the outset following aggressive selling in overnight transatlantic markets which touched off fresh offerings in London. After the initial flurry of selling, the market steadied and managed a minor rally in the late after-hours' business.

Nevertheless, the Gold Mines index registered a fall of 14 points to 287.2—its lowest since the beginning of the month.

Among the heavyweights, Randfontein suffered the biggest loss in giving up £2 to £27¾ following the chaoirman's forecast of lower production, while Free State Geduld fell a point to £22¾ and Western Holdings ¾ to £29.

Financials mirrored the decline in Golds. General Mining fell to a 1980 low of 650p before closing 40 down on balance at 660p, while Anglo American lost 25 to 525p and GFSA ¾ to £29.

London Financials remained depressed with weak base-metal prices and the decline in UK equities prompting persistent small sales. Rio Tinto-Zinc bore the brunt of the selling and dropped 10 to 355p.

Diamonds showed De Beers 8 cheaper at a 1980 low of 368p while Platinums were featured by Impala which dropped 20 to 250p.

Australians drifted in subdued trading. Among the leading issues, losses ranging from 2 to 6 were seen in Bougainville, 95p, Conzinc Riotinto, 240p, MIM Holdings, 196p, and North Broken Hill, 137p.

Golds were on offer with North Kalgurli and Poseidon both 6 down at 62p and 106p, respectively, and the more speculative Samantha Exploration 8 easier at 62p.

FINANCIAL TIMES STOCK INDICES

—	Apr. 22	Apr. 21	Apr. 18	Apr. 17	Apr. 16	Apr. 15	A year ago
Government Secs.	66.63	67.00	66.68	66.74	66.62	66.51	75.04
Fixed Interest	67.23	67.35	67.13	67.02	66.75	66.84	77.00
Industrial	434.3	†441.1	442.7	442.6	443.1	437.8	547.0
Gold Mines	287.2	301.2	300.0	289.2	293.6	290.7	147.2
Ord. Div. Yield	8.10	7.97	7.95	7.96	7.93	8.03	6.31
Earnings, Yld. % (full)	19.90	19.60	19.54	19.50	19.48	19.89	14.23
P/E Ratio (net) (*)	6.11	6.20	6.22	6.23	6.28	6.22	9.01
Total bargains	16,748	18,378	16,505	16,950	16,643	18,172	—
Equity turnover £m	—	108.50	80.34	79.78	81.36	84.19	126.04
Equity bargains total	—	13,298	11,584	11,511	11,229	10,679	20,352

10 am 438.3. 11 am 437.2. Noon 436.3. 1 pm 436.2.
2 pm 435.8. 3 pm 435.4.
Latest Index 01-246 8026.
*Nil=5.75.
Basis 100 Govt. Secs. 15/10/26. Fixed Int. 1928. Industrial Ord. 1/7/35. Gold Mines 12/9/55. SE Activity July-Dec. 1942.
†Amendment.

HIGHS AND LOWS

	1980 High	1980 Low	Since Compilat'n High	Since Compilat'n Low
Govt. Secs.	69.26 (21/1)	63.85 (7/3)	127.4 (9/1/35)	49.18 (3/1/75)
Fixed Int.	69.61 (21/1)	64.70 (10/3)	150.4 (28/11/47)	50.53 (3/1/75)
Ind. Ord.	478.8 (15/2)	406.9 (3/1)	558.6 (4/5/79)	49.4 (26/6/40)
Gold Mines	377.9	265.5	442.3	43.5

S.E. ACTIVITY

	Apr. 22	Apr. 21
Daily		
Gilt Edged	122.7	124.1
Industrials	122.0	94.1
Speculative	27.5	25.2
Totals	83.5	70.9
5-day Av'ge.		
Gilt Edged	124.5	129.1
Industrials	98.6	93.7

NEW HIGHS AND LOWS FOR 1980

LONDON TRADED OPTIONS

Option	Ex'rcise price	April Closing offer	April Vol.	July Closing offer
BP	325	9	35	—
BP	330	—	—	32
BP	350	1	2	—
BP	360	—	—	18
BP	375	½	5	—
BP	390	—	—	10
BP	400	½	3	—
BP	420	—	—	4
Com. Union	140	½	6	8
Cons. Gold	420	56	20	76
Cons. Gold	460	16	91	46
Cons. Gold	500	½	10	26
Cons. Gold	550	½	6	10
Courtaulds	60	7	3	11½
Courtaulds	80	¼	—	3
Courtaulds	90	¼	1	2
GEC	360	14	29	39
GEC	390	½	1	22
Grand Met.	120	6	10	14½
Grand Met.	140	¼	3	4½
Grand Met.	160	¼	1	2
ICI	300	64	10	—
ICI	360	4	5	33
ICI	390	¼	1	13
ICI	420	¼	—	5
Land Secs.	300	16	5	30
Marks & Sp.	80	8½	12	13½
Marks & Sp.	90	¾	13	7½
Marks & Sp.	100	¼	6	3½
Imperial Gp.	110	¼	8	2
Shell	360	1	3	20
Shell	390	1	5	11
Shell	420	1	20	6
Totals			314	

Option	Ex'rcise price	May Closing offer	May Vol.	August Closing offer
Boots	160	30	2	36
Boots	180	14	—	21
Racal Elec.	220	24	100	38
Racal Elec.	240	12	65	25
RTZ	360	10	2	25
Totals			169	

RISES AND FALLS YESTERDAY

FT-ACTUARIES SHARE INDICES

These Indices are the joint compilation of the Financial Times, the Institute of Actuaries and the Faculty of Actuaries

EQUITY GROUPS & SUB-SECTIONS

Figures in parentheses show number of stocks per section

		Tues., April 22, 1980 Index No.	Day's Change %	Est. Earnings Yield % (Max.)	Gross Div. Yield % (ACT at 30%)	Est. P/E Ratio (Net)	Mon., April 21 Index No.	Fri., April 18 Index No.	Thurs., April 17 Index No.	Wed., April 16 Index No.	Year ago (approx.) Index No.
1	CAPITAL GOODS (172)	238.29	−0.8	18.47	6.72	6.76	240.16	240.02	239.72	239.35	277.70
2	Building Materials (28)	236.45	−0.6	17.27	6.78	7.28	237.76	236.90	235.53	233.81	259.98
3	Contracting, Construction (27)	356.23	—	26.82	6.92	4.54	356.21	357.51	355.53	353.67	426.69
4	Electricals (16)	622.07	−1.2	13.37	4.05	9.75	629.40	631.24	631.82	635.48	672.71
5	Engineering Contractors (11)	285.27	−0.3	23.01	9.05	5.71	286.24	284.67	283.47	283.01	415.07
6	Mechanical Engineering (74)	158.92	−0.8	21.44	8.31	5.72	160.13	159.96	160.32	159.64	204.84
8	Metals and Metal Forming (16)	162.96	−0.9	21.30	9.99	5.64	164.36	163.40	163.47	162.39	186.57
11	CONSUMER GOODS (DURABLE) (49)	216.77	−1.1	15.59	5.89	7.91	219.24	218.63	219.13	218.33	251.80
12	Lt. Electronics, Radio, TV (14)	313.65	−1.5	11.66	4.23	10.96	318.34	317.53	317.86	316.30	342.70
13	Household Goods (14)	106.37	−0.4	27.79	10.36	4.25	106.82	106.38	106.67	106.28	176.13
14	Motors and Distributors (21)	102.55	−0.3	24.30	9.71	4.89	102.83	102.40	103.10	103.10	129.45
21	CONSUMER GOODS (NON-DURABLE) (173)	216.32	−1.3	18.85	7.17	6.52	219.16	218.47	217.50	217.88	262.56
22	Breweries (14)	267.87	−2.0	16.53	6.56	7.11	273.39	273.40	271.26	268.18	297.00
23	Wines and Spirits (5)	304.48	−0.7	17.89	6.13	6.89	306.54	306.14	304.66	301.79	335.19
24	Entertainment, Catering (17)	290.92	−2.0	19.67	7.47	6.30	296.83	297.00	291.71	291.45	366.84
25	Food Manufacturers (21)	192.93	−0.5	20.51	7.63	5.97	193.88	191.90	191.69	190.28	230.22
26	Food Retailing (13)	302.11	−0.5	13.05	4.66	9.22	303.71	302.00	299.28	299.43	315.86
32	Newspapers, Publishing (13)	417.13	−0.5	24.71	7.26	5.38	419.39	419.48	416.40	417.58	476.09
33	Packaging and Paper (15)	130.24	+0.2	24.49	8.97	5.03	129.97	130.88	130.94	130.37	150.09
34	Stores (43)	213.88	−2.1	14.21	5.45	9.20	218.43	217.83	217.76	218.86	267.26
35	Textiles (24)	121.55	−1.3	29.67	12.68	4.20	123.20	122.96	123.22	123.06	183.52
36	Tobaccos (3)	204.05	−0.5	28.54	11.34	3.98	205.05	204.05	202.07	202.07	275.94
37	Toys and Games (5)	33.32	−0.5	45.13	15.23	2.73	33.50	32.89	32.93	33.02	91.04
41	OTHER GROUPS (98)	198.73	−1.0	17.65	7.39	6.77	200.68	200.59	201.04	200.14	227.73
42	Chemicals (16)	294.74	−1.6	21.01	8.13	5.44	299.49	300.29	301.06	299.01	319.47
43	Pharmaceutical Products (7)	187.93	−1.7	13.35	7.12	9.09	191.13	190.97	191.87	193.06	269.54
44	Office Equipment (6)	109.11	−0.8	19.44	7.51	5.93	110.03	110.13	111.11	110.18	147.66
45	Shipping (11)	467.95	−0.4	12.11	6.45	10.18	469.80	465.44	466.75	464.24	459.13
46	Miscellaneous (58)	240.80	−0.2	17.13	6.98	7.32	241.35	240.92	240.34	239.36	259.60
49	INDUSTRIAL GROUP (492)	224.48	−1.1	18.23	7.01	6.72	226.92	226.50	226.16	225.57	265.09
51	Oils (8)	715.35	−0.8	31.76	7.20	3.38	721.40	730.67	716.15	716.58	689.83
59	500 SHARE INDEX	263.42	−1.0	20.99	7.05	5.59	266.15	266.46	265.04	264.53	299.70
61	FINANCIAL GROUP (118)	197.61	−1.1	—	6.24	—	199.78	198.81	199.39	198.00	212.19
62	Banks (6)	212.58	−1.2	46.03	7.24	2.66	215.09	214.60	214.71	215.07	251.40
63	Discount Houses (10)	232.54	−0.2	—	8.58	—	232.96	229.87	228.00	222.44	262.23
64	Hire Purchase (5)	200.68	−0.4	16.37	4.95	7.93	201.48	201.94	203.15	203.11	200.18
65	Insurance (Life) (10)	179.49	−2.1	—	7.09	—	183.33	181.16	180.90	177.41	175.63
66	Insurance (Composite) (9)	125.02	−1.8	—	8.61	—	127.34	125.87	127.73	125.34	152.70
67	Insurance Brokers (10)	296.48	−0.8	16.66	6.91	8.44	298.87	301.63	305.08	304.71	329.27
68	Merchant Banks (14)	104.20	−0.2	—	5.99	—	104.42	104.41	103.36	102.64	101.46
69	Property (45)	387.97	−0.5	3.36	2.89	42.65	390.00	388.16	387.55	386.85	357.48
70	Miscellaneous (9)	127.61	−0.2	20.49	7.37	6.21	127.84	127.87	128.11	126.83	127.28
71	Investment Trusts (109)	212.08	−0.9	—	6.18	—	213.96	213.09	212.43	211.42	244.64
81	Mining Finance (4)	183.56	−1.7	14.52	5.37	8.36	186.71	186.53	186.94	189.03	140.45
91	Overseas Traders (19)	386.26	−0.6	12.97	6.96	9.44	388.50	391.37	385.61	390.23	369.30
99	ALL-SHARE INDEX (750)	247.57	−1.0	—	6.81	—	250.17	250.14	249.20	248.63	275.46

FIXED INTEREST PRICE INDICES

	British Government	Tues., April 22	Day's change %	xd adj. today	xd adj. 1980 to date
1	Under 5 years	101.95	−0.15	—	3.45
2	5-15 years	106.32	−0.59	—	3.97
3	Over 15 years	110.14	−0.67	—	4.51
4	Irredeemables	126.85	−0.59	—	1.78
5	All stocks	105.85	−0.47	—	3.89

FIXED INTEREST YIELDS
British Govt. Av. Gross Red.

			Tues., April 22	Mon., April 21	Year ago (approx.)
1	Low Coupons	5 years	12.62	12.53	9.27
2		15 years	12.43	12.34	10.18
3		25 years	12.43	12.34	10.76
4	Medium Coupons	5 years	14.41	14.29	10.81
5		15 years	14.04	13.92	11.47
6		25 years	13.89	13.79	11.65
7	High Coupons	5 years	14.48	14.40	11.18
8		15 years	14.38	14.27	11.85
9		25 years	14.31	14.18	11.91
10	Irredeemables		11.79	11.72	10.58

		Tues., April 22 Index No.	Tues., April 22 Yield %	Mon. April 21	Fri. April 18	Thurs. April 17	Wed. April 16	Tues. April 15	Mon. April 14	Fri. April 11	Year-ago (approx)
15	20-yr. Red. Deb & Loans (15)	49.93	†14.80	49.89	49.82	49.85	49.74	49.62	49.68	49.49	60.75
16	Investment Trust Prefs. (15)	47.81	14.14	47.67	47.67	47.72	47.72	47.69	47.69	48.05	52.95
17	Coml. and Indl. Prefs. (20)	61.72	14.63	61.64	61.38	61.61	61.26	61.45	61.42	61.01	76.61

† Redemption yield. Highs and lows record base dates and values and constituent changes are published in Saturday issues. A new list of the constituents is available from the Publishers, the Financial Times, Bracken House, Cannon Street, London, EC4P 4BY, price 15p, by post 25p.

ACTIVE STOCKS

Stock	Denomination	No. of marks	Closing price (p)	Change on day	1980 high	1980 low
Bass	25p	6	227	−3	231	188
LASMO	25p	6	520	—	535	337
Premier Cons.	5p	6	73	−2	87	39½
Rugby P. Cement "New"	Nil/pd.	6	14½pm	−½	15pm	13pm
Shell Transport	25p	6	344	−4	410	314
Tricentrol	25p	6	318	+4	334	250
Cons. Gold Fields	25p	5	474	−2	533	385
ICL	25p	5	138	−6	145	111
ICI	£1	5	362	−8	402	353
Land Securities	50p	5	315	—	317	244
MFI Furniture	10p	5	72	−4	89	68
P & O Defd.	£1	5	120	−2	123½	105
Royal Insurance	25p	5	318	−4	356	307
Ultramar	25p	5	596	−8	616	412
BP	25p	4	334	−2	412	328

OPTIONS

First Dealings	Last Dealings	Last Declaration	For Settlement
Apr. 21	May 2	Jul. 24	Aug. 4
May 6	May 17	Aug. 7	Aug. 18
May 19	May 30	Aug. 28	Sept. 8

Money was given for the call in Hampton Trust, Premier Oil, P & O Deferred, Homfray, Lasmo, Montague L. Meyer, Poseidon, Tricentrol, Pacific Copper, MEPC, Town and City, Dunlop, FNFC, United Kingdom Property, Muirhead, Dundonian and Courtaulds. No puts were reported, but a double was arranged in Shell Transport.

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Next dealing April 23.

Lloyds Bank International, Geneva
P.O. Box 438, 1211 Geneve 11 (Switzerland)

FT UNIT TRUST INFORMATION SERVICE

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Craigmount Unit Tst. Mgrs. Ltd.
40 Bucklersbury, London EC4N 8BD. 01-248 4984

High Income	37.5	41.1xd	−0.1	10.81
North American	42.3	45.8xd	−1.0	2.74
Canadian Exempt*	50.4	53.5	−3.8	2.85
Canadian Trust	49.0	53.2	−1.1	2.85
Mid Mount High Inc.*	45.9	48.5	+0.7	9.10
Recovery	49.4	54.0xd	−0.2	5.88
Gilt Trust	44.9	46.5	−0.2	12.33

*Weekly dealing day Wednesday.

Crescent Unit Tst. Mngrs. Ltd. (a)(g)
4 Melville Cres., Edinburgh 3 031-226 4931

Cres. Amer. Fd.	23.7	25.6	−0.4	1.46
Cres. Internat'l.	54.5	58.9	−0.8	2.97
Cres. High. Dist.	40.7	43.9	−0.1	11.10
Cres. Reserves	42.8	46.1	−0.5	6.24
Cres. Tokyo	18.1	19.5	−0.2	1.00

NOTES

Prices are in pence unless otherwise indicated. Yields % (shown in last column) allow for all buying expenses. a Offered prices include all expenses. b Today's prices. c Yield based on offer price. d Estimated. g Today's opening price. h Distribution free of UK taxes. p Periodic premium insurance plans. s Single premium insurance. x Offered price includes all expenses except agent's commission. y Offered price includes all expenses if bought through managers. Z Previous day's price. ♥ Net of tax on realised capital gains unless indicated by ♦. ¶ Guernsey gross. ⊘ Suspended. ♦ Yield before Jersey tax. † Ex-subdivision. ‡‡ Only available to charitable bodies.

INSURANCE PROPERTY BONDS

OFFSHORE & OVERSEAS FUNDS

Continued on previous page

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"Shorts" (Lives up to Five Years)

[illegible]

Five to Fifteen Years

[illegible]

Over Fifteen Years

[illegible]

Undated

[illegible]

INTERNATIONAL BANK

[illegible]

CORPORATION LOANS

[illegible]

COMMONWEALTH & AFRICAN LOANS

[illegible]

LOANS

Public Board and Ind.

60	56½	Agric. Mt. 5pc '59-89	60	......	8.86	13.36
78	73½	Alcan 10½pc '89-94	77½	-½	13.81	14.60
28½	25	Met. Wtr. 3pc 'B'	26½	......	11.51	13.50
102	89	U.S.M.C. 9pc 1982	94	+4	10.44	—
89	85½	Do. without Warrants	89	+½	10.60	17.10

LOANS—Continued

Financial

[illegible]

FOREIGN BONDS & RAILS

[illegible]

AMERICANS

[illegible]

CANADIANS

[illegible]

BANKS AND HIRE PURCHASE

1980 High	Low	Stock	Price	+ or –	Div. Net	C'vr	Y'ld Gr's	P/E
244	202	ANZ SA1	210	-2	Q22c	3.7	5.4	5.1
228	183	Alexanders D. £1	228	......	16.0	—	10.0	—
£76½	£56	Algemene Fl.100	£65½	......	Q25%	ф	7.9	ф
345	290	Allen Harvey £1	345	......	21.5	—	8.9	—
128	108	Allied Irish	112	......	hQ8.09	—	7.0	—
16¼	13	Ansbacher (H.) 5p.	13¾	......	—	—	—	—
228	180	Arbuthnot L. £1	228	+2	†10.42	—	9.3	—
360	320	Bk. Ireland £1	325	-5	Q25.0	—	7.5	—
£162	£146	Do. 10pc Conv.	£152	......	Q10%	—	f6.6	—

BANKS & HP—Continued

[illegible]

Hire Purchase, etc.

[illegible]

BEERS, WINES AND SPIRITS

[illegible]

BUILDING INDUSTRY, TIMBER AND ROADS

[illegible]

CHEMICALS, PLASTICS

[illegible]

CHEMICALS, PLASTICS—Cont.

[illegible]

DRAPERY AND STORES

[illegible]

ELECTRICALS

[illegible]

ENGINEERING MACHINE TOOLS

[illegible]

FOOD, GROCERIES, ETC.

[illegible]

FOOD, GROCERIES—Cont.

[illegible]

HOTELS AND CATERERS

[illegible]

INDUSTRIALS (Miscel.)

[illegible]

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Central African

MINES—Continued

Australian

1980 High	Low	Stock	Price	+ or −	Div. Net	C'vr	Y'ld Gr's
25	21	Acmex 50c	23	......	—	—	—
24	12	ACM 20c	15	+2	—	—	—
115	70	Bond Corp.	75	−3	Q3.75	2.2	2.6
156	88	Bougainville I Kina.	95xr	−3	hQ26.4c	ϕ	15.8
265	195	BH South 50c	200	......	✦	—	—
25	11½	Canada Northwest	14	−½	—	—	—
42	8	Carr Boyd 20c	22	−2	—	—	—
£26	£15¼	Central Pacific	£20	......	—	—	—
356	230	Conzinc Riotinto 50c.	240	−2	Q15c	2.1	3.2
39	17	Cultus Pacific N.L.	29	−3	—	—	—
50	20	Eagle Corp. 10c	27	......	—	—	—
26¼	15¼	Endeavour 20c	19½	+1	—	—	—
258	175	G. M. Kalgoorlie 25c	190	−10	†Q3c	—	0.8
46	15	Great Eastern	22½	+½	—	—	—
372	260	Hamptn Areas 5p.	320	......	3.5	2.8	1.6
48	30	Haoma Gold N.L.	40	−3	—	—	—
720	80	Leichardt Expln.	210	−15	—	—	—
72	41	Metals Ex. 50c	55	−3	—	—	—
312	194	M.I.M. Hldgs. 50c	196	−2	‡hQ16.1c	1.8	4.2
40	18½	Minefields Expl.	40	......	—	—	—
155	60	Mount Lyell 25c	66	−4	—	—	—
28	15	Newmetal 20c	15	......	—	—	—
35	12	Nickelore N.L.	13	......	—	—	—
207	137	North B. Hill 50c.	137	−4	†Q12c	1.4	4.6
80	44½	Nth. Kalgurli	62	−6	—	—	—
165	90	Nth. Mining Corp.	98	−4	—	—	—
47	24	N. West Minng N.L.	40	−2	—	—	—
235	155	Oakbridge $A1	155	−6	Q12c	4.7	4.0
122	70	Oilmin N. L.	76	+4	—	—	—
230	128	Pacific Copper	172	−10	—	—	—
465	265	Pancont'l 25c	280	−15	—	—	—
78	42	Paringa M&Ex.5p	42	−2	—	—	—
495	335	Peko-Wallsend 50c	335	−10	‡Q17.5c	ϕ	2.7
230	140	Seltrust A	150	......	—	—	—
£10¼	575	Southern Pacific	712	−25	—	—	—
75	31	Swan Resources 20c.	45	......	—	—	—
13	9½	West Coast 25c	9½	......	—	—	—
264	177	Westn. Mining 50c.	190	−7	†Q7c	1.6	2.0
30	10	Westmex	13	......	—	—	—
96	56	Whim Creek 20c	92	......	—	—	—
24	10½	York Resources	13	−1	—	—	—

Tins

1980 High	Low	Stock	Price	+ or −	Div. Net	C'vr	Y'ld Gr's
25	16	Amal Nigeria 1p	16	......	‡6.0	1.9	53.6
345	265	Ayer Hitam $M1	270	......	‡Q290c	0.9	‡
67	48	Beralt Tin	49	......	4.5	ϕ	13.1
185	149½	Berjuntal $M1	165	......	‡Q95c	1.0	‡
230	153	Geevor	205	......	8.71	3.1	6.1
11	10	Gold & Base 12½p	10	......	—	—	—
365	310	Gopeng Cons.	330	......	†25.0	1.8	11.0
310	280	Hongkong	300	......	35.87	ϕ	17.1
105	90	Idris 10p	98	......	28.0	ϕ	11.7
15	14	Jantar 12½p	14	......	—	—	—
77	64	Kamunting $M0.50	67	......	Q47½c	1.1	15.9
375	300	Killinghall $M1	375xd	+35	Q100c	ϕ	5.4
670	485	Malay Dredging $M1	580xd	......	mQ105c	2.6	3.7
33	26	Pahang	27	......	0.44	0.3	2.4
108	92	Pengkalen 10p	92	......	6.0	1.3	9.4
290	230	Petaling $M1	260	......	Q150c	1.4	11.7
70	57	Saint Piran	60	......	‡‡2.5	6.4	‡
44	30	South Crofty 10p	32	......	‡3.0	2.0	‡
255	180	South Kinta $M0.50	200	......	Q150c	1.0	15.3
400	340	Sthn Malayan $M1	360xd	−5	†Q175c	2.1	9.9
295	215	Sungei Besi $M1	265	+5	†Q520c	1.0	40.1
39	22½	Supreme Corp. $M1	35	......	hQ8c	—	4.7
100	95	Tanjong 15p	95	......	Z4.5	ϕ	6.8
95	80	Tongkah H. Tin	80	......	Q45c	1.3	12.6
275	220	Tronoh $M1	230	......	†Q25c	5.2	2.2

Copper

1980 High	Low	Stock	Price	+ or −	Div. Net	C'vr	Y'ld Gr's
235	130	Messina R0.50	196	......	mQ10c	ϕ	3.0

Miscellaneous

1980 High	Low	Stock	Price	+ or −	Div. Net	C'vr	Y'ld Gr's
160	78½	Anglo-Dominion	135	......	—	—	—
97	58	Barymin	66	−4	—	—	—
15½	12	Burma Mines 17½p	15½xd	......	0.62	ϕ	5.8
502	330	Cons. March. 10c.	360	+10	MQ100c	1.8	15.9
585	325	Northgate C$1	330	−20	—	—	—
485	327	R.T.Z.	355	−10	15.0	q3.3	6.2
33	16	Robert Mines	26	−1	—	—	—
58	27	Sabina Inds. C$1.	30	−5	—	—	—
650	440	Tara Exptn. $1	440	−35	—	—	—

NOTES

Unless otherwise indicated, prices and net dividends are in pence and denominations are 25p. Estimated price/earnings ratios and covers are based on latest annual reports and accounts and, where possible, are updated on half-yearly figures. *P/Es are calculated on* "net" distribution basis, earnings per share being computed on profit after taxation and unrelieved ACT where applicable; bracketed figures indicate 10 per cent or more difference if calculated on "nil" distribution. Covers are based on "maximum" distribution; this compares gross dividend costs to profit after taxation, excluding exceptional profits/losses but including estimated extent of offsettable ACT. Yields are based on middle prices, are gross, adjusted to ACT of 30 per cent and allow for value of declared distribution and rights.

- ● "Tap Stock.
- * Highs and Lows marked thus have been adjusted to allow for rights issues for cash.
- † Interim since increased or resumed.
- ‡ Interim since reduced, passed or deferred.
- ‡‡ Tax-free to non-residents on application.
- ϕ Figures or report awaited.
- †† Unlisted security.
- ≠ *Price at time of suspension.*
- ¶ Indicated dividend after pending scrip and/or rights issue; cover relates to previous dividends or forecasts.
- ✦ Merger bid or reorganisation in progress.
- ♣ Not comparable.
- ♠ Same interim; reduced final and/or reduced earnings indicated.
- § Forecast dividend; cover on earnings updated by latest interim statement.
- ‡ Cover allows for conversion of shares not now ranking for dividends or ranking only for restricted dividend.
- ★ Cover does not allow for shares which may also rank for dividend at a future date. No P/E ratio usually provided.
- ♥ Excluding a final dividend declaration.
- ✲ Regional price.
- || No par value.

§§ Yield based on assumption Treasury Bill Rate stays unchanged until maturity of stock. a Tax free. b Figures based on prospectus or other official estimate. c Cents. d Dividend rate paid or payable on part of capital; cover based on dividend on full *capital*. e Redemption yield. f Flat yield. g Assumed dividend and yield. h Assumed dividend and yield after scrip issue. j Payment from capital sources. k Kenya. m Interim higher than previous total. n Rights issue pending. q Earnings based on preliminary figures. s Dividend and yield exclude a special payment. t Indicated dividend: cover relates to previous dividend, *P/E* ratio based on latest annual earnings. u Forecast dividend: cover based on previous year's earnings. v Tax free up to 30p in the £. w Yield allows for currency clause. y Dividend and yield based on merger terms. z Dividend and yield include a special payment: Cover does not apply to special payment. A Net dividend and yield. B Preference dividend passed or deferred. C Canadian. E Minimum tender price. F Dividend and yield based on prospectus or other official estimates for 1979-80. G Assumed dividend and yield after pending scrip and/or rights issue. H Dividend and yield based on prospectus or other official estimates for 1980-81. K Figures based on prospectus or other official estimates for 1979-80. M Dividend and yield based on prospectus or other official estimates for 1980. N Dividend and yield based on prospectus or other official estimates for 1979. P Figures based on prospectus or other official estimates for 1978-79. Q Gross. T Figures assumed. Z Dividend total to date.

Abbreviations: xd ex dividend; xc ex scrip issue; xr ex rights; xa ex all; xR ex capital distribution.

REGIONAL MARKETS

The following is a selection of London quotations of shares previously listed only in regional markets. Prices of Irish issues, most of which are *not officially listed in London, are as quoted on the Irish exchange.*

Stock	Price	+ or −	IRISH	Price	+ or −
Albany Inv. 20p	27	......			
Bertam	18	......	Conv. 9% '80/82	£86	......
Bdg'wtr. Est. 50p	365	−5	Nat. 9¾% 84/89	£72	......
Clover Croft	60	......	Fin. 13% 97/02	£80	......
Craig & Rose £1	£10½	......	Alliance Gas	50	......
Fife Forge	37	......	Arnott	360	......
Finlay Pkg. 5p	20	......	Carroll (P.J.)	52	......
Graig Ship. £1	£12	......	Clondalkin	103	......
Higsons Brew	75	......	Concrete Prods.	77½	......
Holt (Jos) 25p	255	......	Heiton (Hldgs.)	33	......
I.O.M. Stm. £1	172	......	Ins. Corp.	250	......
Pearce (C. H.)	385	......	Irish Ropes	68	......
Peel Mills	39	......	Jacob	35	+2
Sheff. Refrshmt	99	......	T.M.G.	138	......
Sindall (Wm.)	155	......	Unidare	102	......

OPTIONS

3-month Call Rates

Industrials					
A. Brew	8	I.C.I.	32	Utd. Drapery	9
BOC Intl.	6	"Imps"	7	Vickers	14
B.S.R.	5	I.C.L.	45	Woolworths	6½
Babcock	12	Inveresk	5	**Property**	
Barclays Bank	30	Ladbroke	15	Brit. Land	7
Beecham	13	Legal & Gen.	14	Cap. Counties	9
Blue Circle	25	Lex Service	10	Land Secs.	25
Boots	17	Lloyds Bank	24	MEPC	17
Bowaters	16	"Lofs"	3½	Peachey	13
B.A.T.	25	London Brick	6	Samuel Props.	12
Brown (J.)	7	Lucas Inds.	20	Town & City	2
Burton 'A'	22	"Mams"	14	**Oils**	
Cadburys	5½	Mrks. & Spncr	9	Brit. Petroleum	38
Courtaulds	8	Midland Bank	30	Burmah Oil	20
Debenhams	8	N.E.I.	5	Charterhall	12
Distillers	21	Nat. West. Bank.	32	KCA	11
Dunlop	5½	P & O Dfd.	9	Premier	12
Eagle Star	14	Plessey	16	Shell	35
F.N.F.C.	2½	Racal Elect.	20	Tricentrol	35
Gen. Accident	21	R.H.M.	4½	Ultramar	50
Gen. Electric	30	Rank Org.	18	**Mines**	
Glaxo	40	Reed Intnl.	17	Charter Cons.	18
Grand Met.	12	Sears	5½	Cons. Gold	52
G.U.S. 'A'	30	Tesco	7	Lonrho	12
Guardian	23	Thorn	25	Rio T. Zinc	35
G.K.N.	22	Trust Houses	14		
Hawker Sidd	16	Tube Invest.	27		
House of Fraser	12	Unilever	40		
		U.D.T.	6		

A selection of Options traded is given on the London Stock Exchange Report page

"Recent Issues" and "Rights" Page 40

This service is available to every Company dealt in on Stock Exchanges throughout the United Kingdom for a fee of £500 per annum for each security

FINANCIAL TIMES

Wednesday April 23 1980

Prices in U.S. increase by 1.4%

By David Buchan in Washington

CONSUMER prices in the U.S. rose 1.4 per cent in March, as in the previous two months, putting the inflation rate, which has become the sharpest issue in the Presidential election campaign, on a plateau.

The steady March increase in the Consumer Price Index was caused by higher food, housing and clothing costs—only fractionally offset by a slower rise in energy prices.

The Government reported that for the first three months of 1980 the index had risen at a compounded annual rate of 18.1 per cent. This compared with increases of around 13 per cent in each of the four quarters of 1979.

The next several months would show no relief on the inflation front, Mr. Paul Volcker, chairman of the Federal Reserve Board, said in a television interview before the latest index figures were released. He based this warning on two factors—the 10 cents a gallon petrol conservation fee which President Carter is to impose, and the fact that mortgage interest rates, a significant component of the Consumer Price Index, would react slowly to the recent easing of money market rates.

Record

President Carter and his economic officials hope inflation will start dropping sharply by the end of the year—to 12.8 per cent compared with the fourth quarter of 1979.

Mr. Volcker, of the constitutionally independent Central Bank, said this was quite likely, but bringing the inflation rate back below 10 per cent would be very hard, unless the U.S. improved its dismal productivity record.

He saw no reason why rates should not decline, provided there was some slackening of inflation on the horizon coupled with firm evidence of weakening in the economy. Economic activity showed "every sign of having declined"

But no one at home or abroad should interpret the recent decline in U.S. interest rates as a change in the Fed's policy. It was still sticking to its restrictive money supply targets, and the fall in rates was only a proper reaction to weaker credit demand.

Mr. Volcker said there was therefore no cause for the dollar to come under serious international pressure in the coming months. A weaker U.S. economy this year would also suck in less imports and so stem the trade deficit.

Mr. Volcker, a strong believer in free market processes, showed his distaste for the direct credit controls introduced on March 14 by President Carter.

Continued from Page 1

Iran

is said.

There was some satisfaction among EEC Foreign Ministers last night that they had delivered most of what President Carter could reasonably have expected. The action will be in line with the sanctions programme which would have been adopted by the UN in January but for a Soviet veto.

There was no equivalent confidence that the measures to be taken would secure the hostages' release.

The possibility that the U.S. will move to military action to break the stalemate remains real. But the delay in implementing an EEC programme until mid-May means that the EEC allies may have some leverage with which to argue that the U.S. should stay its military hand well into June or July, by which time the Iranian Parliament may have met, according to a timetable already indicated by the ruling Revolutionary Council in Iran.

Isle of Grain work will stop in June

BY PAULINE CLARK, LABOUR STAFF

CONSTRUCTION work on the strike-torn Isle of Grain power station, planned to be Europe's largest oil powered station, will end in June with the loss of 2,000 jobs, the Central Electricity Generating Board said yesterday.

The future of the £560m station in Kent has appeared uncertain for months because of the prolonged dispute about bonus payments for 27 laggers. It has already resulted in 600 redundancies this month.

But this is the first time the board has spelled out its intentions. It follows warnings that if a solution were not found to the dispute, more redundancies would be likely in the summer.

Union leaders in the General and Municipal Workers' Union, to which the laggers belong, recently indicated that they may press for a public inquiry. They say the project has been disrupted by commercial difficulties more than by labour relation problems.

Mr. George Henderson, national construction secretary in the Transport and General Workers' Union which represents some 500 site workers, said last night the news was "tragic." But the problem could be solved "with a bit of commonsense."

It was being taken up by union representatives in civil engineering, and a meeting would be called of shop stewards and local leaders.

A total of £450m has been spent on the station, although only one of the five generating units is completed and working. A decision will have to be taken on whether to dispose of millions of pounds worth of equipment stored on the site, or mothball the project.

The board said: "We will make the site safe and stilly do all we can to try to get a solution. But, looking at the current situation, it does not appear very likely that we will find one."

The row about bonus payments concerns a straightforward claim by the municipal workers' union that payments to laggers should be open-ended, but employers fear leap-frogging.

Union and thermal insulating contractor representatives met at the beginning of this month to try to find a solution, after a compromise on bonus payments put forward by Mr. Len Murray, TUC general secretary.

Unions say the attempt failed because the generating board insisted on dictating terms.

Martin Dickson writes: Lower than expected electricity demand, the high cost of fuel oil and the need to keep a tight rein on capital expenditure mean the generating board is under no great pressure to complete the Isle of Grain station rapidly.

It is far more concerned to overcome the labour problems, before embarking on the 15,000 MW nuclear expansion programme it is scheduled to start in 1982-83.

Possible options under consideration include moth-balling, moving some generating sets to the new nuclear station to be built at Heysham, Lancashire, or converting it from oil to coal-oil slurry.

Fiat hesitates over Seat

BY PAUL BETTS IN TURIN AND ROBERT GRAHAM IN MADRID

Fiat, Italy's largest private enterprise, is reconsidering whether to subscribe to its share of Pta 2.8bn in the Pta 6bn (£38m) capital increase of Seat, the Spanish car group, which is scheduled for the end of next month.

The Spanish Government, which has detected and become seriously worried about the signs of Fiat's hesitancy, is now considering the alternative of Japanese involvement in Seat.

Three weeks ago senior officials of INI, the Spanish state holding company and currently the other major shareholder in Seat, went to Tokyo and discussed INI's automotive interests with Japanese manufacturers. They raised the possibility with Toyota and Nissan of one or the other taking an interest in Seat.

Seat's capital-raising operation is the second tranche of a Pta 12bn capital increase, half of it already complete, which is in turn part of a major Pta 50bn financial restructuring to be funded by a group of six Spanish banks.

Fiat already controls 41 per cent of Seat, against INI's holding of 39 per cent. As a result of a takeover plan approved last May it is due to increase this stake to 81 per cent by buying shares from INI by the end of 1981.

Fiat's willingness to go along with the second phase of capital-raising next month is regarded in Spain as a key indication of its future commitment to Seat.

At the opening of the motor show in Turin yesterday, Sig. Umberto Agnelli, the Fiat managing director, indicated that his company was now "reviewing the position."

Sig. Agnelli confirmed that Fiat and INI were holding consultations on the future of the troubled Spanish car company which has been directly hit by the slump in hte Spanish car market and by recent Government measures aimed at controlling inflation in Spain.

In agreeing to take over Seat, Fiat assumed an enormous financial burden. It will have to cover Seat's entire 1979 loss, estimated at more than $180m.

With stocks of unsold cars now standing at more than 60,000—and after a 24 per cent drop in Seat's first quarter sales this year's losses could be even higher. In addition, Fiat has to fund its increasing equity investment in Seat and finance the investment needed to launch the Panda and Ritmo (Strada) models in Spain.

In Spain it appears the INI officials are less than happy with the results of the first full year of Fiat's management control of Seat.

IMF scheme 'given boost'

BY JONATHAN CARR IN BONN

THE United States freeze on Iranian assets in U.S. banks may have provided an unexpected boost to the International Monetary Fund's scheme for a substitution account.

West German Government officials feel that the freeze, imposed last November, has made the IMF scheme more attractive to the oil producing countries, whose support is considered essential. The proposed account will be a key issue at the meeting in Hamburg later this week of the IMF's interim committee.

The OPEC states would be able to pay some of their huge dollar holdings into the account, receiving in return assets expressed in the IMF's Special Drawing Rights (SDR). These would not be susceptible to a freeze or similar unilateral action by a national government.

At a Press conference yesterday, the West German Finance Minister, Herr Hans Matthoefer, said the events in Iran had clearly not reduced the interest of the oil producers in the substitution account. Other officials say they expect substantial backing from—among others—Saudi Arabia, providing other conditions involved in setting up the scheme can be fulfilled.

The account is intended to mop up part of the world's surplus dollars — which otherwise could be shifted quickly into other currencies at a time of dollar weakness. This argument seemed strong at the IMF meeting in Belgrade last October.

A major question now is whether the strengthening of the dollar since then has reduced the niterest of the U.S.

The U.S. attitude will emerge this week in discussion of two major technical problems. These involve the interest rate to be paid to depositors in the account and the risk involved in changes in the exchange rate between the dollar and the SDR.

If the U.S. shows it is willing to shoulder much of the burden in resolving these issues, the German side feels the scheme stands a good chance of being fully agreed by the autumn. If the signs are that the U.S. would prefer to rely almost entirely on sales of IMF gold to cover the risks involved, then the scheme is unlikely to go ahead.

Lombard, Page 12

Plan to save British Enkalon

BY LISA WOOD AND CHARLES BACHELOR

BRITISH ENKALON, the UK subsidiary of Akzo, the Dutch chemical and fibres group, will undergo a major restructuring by its parent company at a cost of £30m to £40m.

The British company, in which Akzo has a 71 per cent share, has made a los for four years.

It "can only be saved by a major effort on the part of the group," said Mr. A. A. London, deputy chairman of Akzo.

It is planned to integrate British Enkalon more closely into the group's European operations. More central control will be exercised over production and sales and efforts made to strengthen the product range.

The planned changes are part of long-term restructuring of Akzo's synthetic fibres activities. This has been proceeding over the past five years.

The position of the UK subsidiary deteriorated in the second half of last year under the impact of cheap U.S. imports, particularly polyester textile yarns and carpet yarns, and increases in raw material costs and interest rates.

British Enkalon employs about 2,500 people in its textile activities in Leicester and Northern Ireland.

Mr. R. L. Schierbeek, the company's chief executive, said Akzo's participation in the UK company's revitalisation and modernisation was :: long term." There was no question of immediate massive injection of funds.

It is not certain whether jobs will be lost. Discussions with unions at British Enkalon are proceeding.

Akzo results, Page 29

BL Longbridge idle after walkout

BY ARTHUR SMITH, MIDLANDS CORRESPONDENT

PRODUCTION of BL Cars' Mini and Allegro models was at a standstill at Longbridge, Birmingham, last night with 6,000 workers laid off. Nearly 550 employees walked out in protest at the company's first attempt to enforce the conditions of the new pay package.

Longbridge, where the £285m Mini Metro will soon go into mass production, will test the management's ability to implement proposed new work practices.

The management told 48 men who rubbed down car bodies before painting that under the new agreement they were not entitled to "togging up allowances"—payments of up to £S.25 a week for donning protective clothing.

In its first move against the restrictive practices it says are crippling productivity, the maangement seems to have chosen a dispute in which it believes it has an especially strong case.

According to BL payments to the 48 are an anomaly, as the men are not required to wear clothing any different from that of other workers.

An early and successful confrontation would clearly help the management gradually to erode opposition to flexibility in the use of labour. But the Longbridge stewards appear equally determined to mount a campaign of resistance and can be expected to choose the issues on which they will fight.

June, when production of the Mini Metro is to be stepped up, could prove the crucial period in determining the success of the aggressive policy pursued by Sir Michael Edwardes, the BL chairman.

Organised union opposition to the 5 per cent pay offer and work practices finally collapsed yesterday with the decision by 1,600 workers at the Sherpa van factory, Birmingham, to return to work.

Of the 18,500 workers who walked out on official strike in protest at the company's decision to impose the pay package unilaterally, only the 3,000 employees at the two Jaguar plants in Coventry have remained out.

They are disputing a proposed new pay structure, and will meet today to reconsider their position. But even a return to work would not rid the company of unrest by a large group of workers who believe they have a justified grievance.

BL, with its tough policy of threatening to sack workers who do not accept the new terms of employment, has won the set-piece confrontation with the unions.

But the Longbridge and Jaguar disputes provided clear evidence of the problems that will have to be overcome in implementing the details of the controversial package.

BL annual report, Page 5

Likely successor to BSC chairman

By John Elliott in London and Ian Hargreaves in New York

A 67-YEAR OLD Scottish engineer who has lived in the U.S. for more than 35 years is the gront runner to succeed Sir Charles Cilliers as chairman of the British Steel Corporation.

He is Mr. Ian MacGregor, who is due to fly to London early next week for talks with the Government about the details of the £48,500-a-year job. It falls vacant when Sir Charles retires in September.

Mr. MacGregor is best known as the former head of AMEX (American Metal Climax). But he also hit the headlines in the UK a few years ago when he was rumoured as a possible chairman of BL he then became a non-executive director of the company and in 1977 was made non-executive deputy chairman to Sir Michael Edwards, a post he still holds.

In New York yesterday, where one of his main business interests is being a partner in Lazard Freres, the investment bank, he said: "I ar one of several people who have been approached about the BSC job and I expect to have talks in London next week."

Mr. MacGregor's name has been rumoured for the job for some weeks, although there have been worries about whether he would be prepared to give up his Conneticut home and his many inter-3national business interests.

Land offer in Stansted

PLANS BY the British Airports Authority to acquire up to 1,500 acres near Stansted Airport, Essex, were announced yesterday. The authority said it was prepared to pay "fair market prices," with compensation for disturbance caused, similar to that payable if the properties were purchased compulsorily.

The authority will seek to safeguard 2,500 more acres against unnecessary development, and would consider buying land and properties there as soon as it can. Powers to do this are in the Civil Aviation Bill now before Parliament, expected to become law by November.

The authority's decision stems from the Government plan to develop Stansted, as the third London Airport, from its present 400,000 passengers a year to about 15m by the late 1980s. This development is subject to a public planning inquiry.

"We intend applying this summer for permission to build the new terminal," said the authority yesterday. "The public inquiry is expected to open early in 1981 and continue for the rest of the year."

Weather

UK TODAY

MAINLY dry, cloudy; some rain in Scotland.

England, Wales, Isle of Man, Borders.

Dry, cloudy with bright intervals. Max. 11 to 14C (52 to 57F).

Elsewhere:

Cloudy, hill fog, occasional rain. Max. 8-13C (46 to 55F).

Outlook: Rain or drizzle, chiefly in N., and E. Bright intervals.

WORLDWIDE

		Y'day midday °C	°F			Y'day midday °C	°F
Aiaccio	F	14	57	Locarno	F	14	57
Algiers	S	17	63	London	R	10	50
Amsdm.	C	7	45	Luxmbg.	C	5	41
Athens	R	18	64	Madrid	S	14	57
Bahrain	S	32	91	Majorca	S	17	63
Barclna.	S	14	57	Malaga	C	18	64
Belfast	C	11	52	M'chstr.	C	12	54
Belgrd.	F	7	45	Melbne.	R	10	68
Berlin	C	8	46	Milan	S	15	59
Biarritz	S	13	55	Mntreal	C	3	38
Bmghm.	C	10	50	Moscow	S	17	63
Blackpl.	C	11	52	Munich	S	5	41
Boulgn.	C	8	46	Nairobi	S	23	73
Bristol	C	12	54	Naples	S	13	55
Brussels	F	8	46	Nwcstl.	C	11	52
Budpst.	R	5	41	N. York	S	12	54
B. Aires	S	28	82	Nice	S	15	59
Cairo	S	30	86	Nicosia	S	19	66
Cardiff	C	10	50	Oporto	S	18	64
Cas'b'ca	C	18	64	Oslo	S	12	54
Cape T.	C	18	64	Paris	R	10	50
Chicago	S	26	79	Perth	C	13	56
Cologne	F	7	45	Prague	C	6	43
Conhgn.	S	9	48	Reykjvk.	F	3	37
Corfu	S	16	61	Rhodes	S	23	73
Dublin	C	13	55	Rio J'o	S	27	81
Dbrvnk.	R	7	45	Rome	R	9	48
Ednbgh.	C	13	55	Salzbrg.	R	2	36
Faro	F	19	66	Singapr.	C	31	87
Frankft.	R	4	39	Stckhm.	C	10	50
Funchal	C	18	64	Strasbg.	R	6	43
Geneva	C	6	43	Sydney	S	23	73
Gibrltr.	F	19	66	Tangier	S	22	72
Glasgow	F	15	59	Tel Aviv	S	19	66
G'rnsey	C	10	50	Tenerife	F	17	63
Helsinki	S	8	46	Tokyo	C	15	60
H. Kong	C	25	78	Toronto	S	12	54
Innsbrk.	F	5	41	Tunis	F	16	61
Invrns.	C	11	52	Valencia	S	17	63
Istanbul	F	19	66	Venice	F	13	55
Jersey	C	12	54	Vienna	Sl	2	36
Jo'burg	S	22	72	Warsaw	R	5	41
L. Plms.	C	20	68	Zurich	C	5	41
Lisbon	S	19	66				

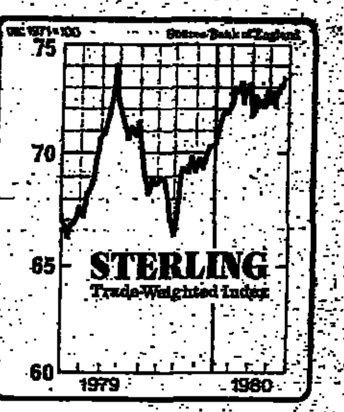
C—Cloudy. F—Fair. Fg—Fog. R—Rain. S—Sunny. Sl—Sleet. Sn—Snow.

THE LEX COLUMN

Pernod's challenge to Grand Met

The movement towards a wider embargo of Iranian oil imports has rekindled the foreign exchange market's interest in the North Sea, and the recent fall in eurodollar rates makes sterling deposits highly attractive again. Yesterday the pound returned almost to the peaks of last summer on its trade-weighted index, which, given the UK's continuing high inflation relative to its trading partners, implies a further significant erosion of the competitiveness of British industry since then. In gilt-edged, however, profit-taking in recent issues of stock overrode the strength of sterling, and long-dated issues fell by around ½ point.

Index fell 6.8 to 434.3



Grand Met/Liggett

It has not taken long for the first major twist to emerge in Grand Metropolitan's contentious offer for Liggett Group. The latter has blandly agreed the sale to Pernod of the wines and spirits subsidiary Austin Nichols which Grand Met was keen to buy last year but which it was told was not for sale. Unlike in the UK, there is no Takeover Panel to block such manoeuvrings during the period of a takeover offer; but Grand Met and other Liggett shareholders will no doubt be able to consider legal action to prevent the disposal of a key asset at this juncture.

Shareholders could claim that the disposal is designed to frustrate their opportunity to consider the $50 a share cash offer, and indeed Grand Met put its offer on the table partly because it feared that Liggett was planning substantial asset sales. Alternatively, Grand Met might consider outbidding Pernod for Austin Nichols. The problem here is likely to be the price, for $97½m represents over 20 times underlying earnings, and sheds a rather less flattering light on the $466m value which the Grand Met offer places on the whole of Liggett.

Docks Board

Compared with most other UK port authorities the British Transport Docks Board is no doubt a powerhouse of expansion. But yesterday's figures revealing a 10 per cent decline in profit after historic cost depreciation to £26.8m in 1979 suggest that a glamour rating will not be a feature of the planned launch of 49 per cent of the company on the stock market.

Before the flotation, two aspects of the balance-sheet will need to be sorted out; the capital structure and the valuation of the fixed assets. At the end of 1979 loans, practically all from the Government, totalled 51 per cent of the capital employed and presumably this gearing could be made more manageable by replacing part or all the debt with equity. Total conversion would create a group with net worth of £176m, and this could be bolstered by a revaluation of fixed assets. Currently, for instance, land is assessed at transfer values in 1963 and 1968.

The rapid expansion of the early 1970s as the group was turned round is now over and the prospects for the next couple of years appear rather sluggish. So a p/e multiple on the actual tax charge of about the market average of 6½ produces a valuation of £100m, assuming the conversion of debt to equity. This would be at a handsome discount to net worth.

BL

In its 1978 accounts, BL decided not to produce current cost figures because of the uncertainty over the proposed accounting standards. This excuse is no longer available, so BL has had to fall back this year on vague talk about how "impractical" it is to assess the costs attributable to its older assets in order to explain its failure to provide inflation-adjusted accounts.

This is all slightly absurd, since BL is precisely the sort of business which overstates its profits (or, more usually, understates its losses) by failing to provide a proper depreciation charge. The group is still operating entirely written-off fixed assets which originally cost it £500m in undepreciated sterling.

BL seems to draw up its accounts more in order to permit eventual compliance with some target dreamed up by the NEB than to encourage understanding of its business. There is no quantative breakdown of the car side's operations — if anything, the 1979 report is even less informative than the previous year's. The company fails to provide fully for the anticipated costs of its restructuring programme: for some reason the auditors concur with this.

In the absence of information there is nothing for it but to guess, and it seems reasonable to estimate that in real terms BL was losing more than £200 on each of the 698,000 vehicles it sold last year.

At least the 1979 cash outflow was held to £334m — a reasonable figure in the circumstances. The NEB's scheme to finance BL's vehicle stocks is clearly coming in useful here. Capital spending will remain high this year, however, and the group's new £300m of equity looks unlikely to last very long, although the NEB's obliging conversion of debt into equity will save £15m of finance costs this year.

Thomas Tilling

Thomas Tilling has achieved what it describes as a "pleasing" start to the year, and it is happy with all but one of its recent clutches of U.S. acquisitions — the exception being the insulation company Clecon which has run into competitive conditions. In sharp contrast, the apparently more speculative new interests linked to the oil and gas exploration sector are doing very nicely.

The annual report sets out in figures the scale of the recent acquisitional surge, leading to a cash outflow of £88m in 1979, financed mostly by th erights issue. But Tilling is now fairly close to its target of 20 per cent to 25 per cent of earnings from the U.S. It would like to complete its geographical re-orientation by picking up around 10 per cent of its earnings in the Far East, but it is proving much harder than in the U.S. to find the right sort of investment opportunities in places like Hong Kong and Singapore.

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